It's about belonging

Learning Opportunities Task Force Report: 1997 to 2002

Final Report

**Ministry of Training,
Colleges and Universities**

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Ontario

November 20, 2002

The Honourable Dianne Cunningham, Minister
Ministry of Training, Colleges and Universities

Dear Minister,

On behalf of the entire team of the Learning Opportunities Task Force, the staff and students of each Pilot Project, the small committed group of consulting professionals, the very qualified members of the Committee of Reference, and our capable administrative staff of three, I am pleased to present our final report - the culmination of five years of dedication to a project which is unique in the world.

I am deeply grateful to have been granted this rare opportunity to serve Ontario students with Learning Disabilities and look forward, with eager anticipation, to the establishment of the successor structure which will implement the recommendations which embed the achievements of the Task Force firmly within the educational experience of Learning Disabled students in this Province.

Thank you for your continuing interest and support.

Yours sincerely,

Bette M. Stephenson

Dr. Bette M. Stephenson, Chairman
Learning Opportunities Task Force

Learning Opportunities Task Force
1997 to 2002

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It's About Belonging

LOTF would like to thank Spencer J. Harrison, a successful student with LD from Trent University and the pilot project staff at Trent for allowing us to use Mr. Harrison's painting, which appears on the cover of the report.

In describing his painting, Mr. Harrison wrote the following:

"One of the most important components of any special needs department is the sense of belonging that it creates or restores for the student. Being diagnosed as an LD student isolated me from the greater community of students. Once I got involved with the Special Needs Department and accessed the tools I needed to work with my learning disabilities, I no longer felt isolated. In fact, I was now a member of two communities, the supportive special needs community and the competitive greater student body.

It's About Belonging is a painting which illustrates these feelings for me. The boat in the extreme foreground of the painting was intended to be a metaphorical rendering of me, or any other LD student , before they join the Special Needs community, represented by the boats in the background. The boat in the foreground could also be read as the LD student, having gained the necessary tools, now a little more enlightened, excelling ahead of the others. In either case, the boat in the foreground is a little different in shape and reflection from the others, but strong, bright and beautiful."

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(i) Introduction

On May 6, 1997, the Hon. Ernie Eves, then Treasurer and now Premier of Ontario, made the following statement, as part of his budget speech:

"Too few students with learning disabilities get the help that they need to make the transition to college or university. To help these students realize their potential, we will establish pilot projects at the college and university level, to provide real help to learning disabled students in a meaningful way."

The **Learning Opportunities Task Force** (LOTF), under the leadership of Dr. Bette Stephenson, a former Minister of Education, is the mechanism through which these pilot projects have been established with a clear cut mandate:

1. to improve the transition of students with specific learning disabilities from secondary school to post-secondary education, and

2. to enhance the services and supports that students with learning disabilities receive within the post-secondary educational sector, such that they can complete their education successfully.

(ii) The structure of the LOTF report

The LOTF's final report covers the period from the initial start of the research work in 1997 to the summer of 2002, when six of the seven pilot projects completed their piloting activities and submitted their final summative reports. The report is comprised of the following components:

1. The main report

This includes I. the LOTF approach; II. articulates the LOTF's key findings and recommendations; III. The LOTF legacy and IV. The next challenge.

2. The appendices

The report also has three appendices. Appendix A and B contain an analysis of data gathered over four years of piloting. These are:

- Appendix A: **Summative Analysis of the Information Obtained from LOTF Student Questionnaires during the period September 1998 to September 2002**
- Appendix B: **Review and Analysis of the Data Obtained from Institutional Tracking Reports for Pilot Activity between September 1998 and June 2002**

The third appendix is a compilation of the institutional executive summaries, submitted with the pilots' final reports in June, 2002.

3. The summaries

There are two summaries accompanying but separate from the main report.

The first one is a brief **Executive Summary** providing an overview of LOTF's work over the past five years and the key findings together with the supporting data.

The second one, the **Report Summary**, is a document including, in addition to a more detailed overview and the same key findings, the recommendations that have been generated from the key findings and explanatory comments.

4. The technical report

The fourth component is the technical report, a binder of supplementary documentation about LOTF activities. Its focus is on the initial year and then pilot-oriented applied research principles, method, and procedures developed to fulfill the Task Force mandate. Those who wish more extensive technical information including, for example, earlier report summaries, questionnaires, and full lists of pilot project staff, are welcome to consult the binder. The technical report, which follows the same sequence as this main report, is available from the LOTF Office.

It is our intent to create a compilation of student commentary and student work for distribution to Ontario's secondary schools. The purpose of this will be to ensure that students who are still in school and are thinking about post-secondary education should be encouraged by the experiences and recommendations of the pilot students. This material will be available in multiple formats in order to make it fully accessible to all students with learning disabilities.

5. It's About Belonging

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I. The LOTF Approach

> ***"I am thankful for having the assistance for the first time in my life. It has been acknowledged that I have a problem with learning like other people do. When you are younger you always feel that you are stupid, but you're really not. You just learn differently."***
>
> **Pilot student quote**

I.1. A brief overview of methodology

Over the past five years, The Learning Opportunities Task Force successfully collected and analyzed a significant body of findings on effective post-secondary practices to support students with learning disabilities.

As described under the research heading below, in the first year (1997-1998), the LOTF Consulting Team assembled a considerable collection of information, specifically:

- baseline information from students, staff, faculty and administrators, about relevant policies and practices at Ontario's colleges and universities;
- surveys of current practices and claims of best practice from Canada, USA and western Europe;
- consultations with some educators, policy makers, relevant organizations and adults with LD who were not in - and in some cases had never attended - post-secondary institutions.

Reports with analyses and conclusions for each of the above activities were used to shape the vision statement included in this report about ideal post-secondary practices and outcomes, and for the execution of a request for proposals inviting submissions from any interested college or university in the province, to participate in a time-limited, action-orientated and student-centred pilot venture.

Eight contracts, selected from a total of thirty five proposals and involving thirteen institutions were awarded to begin in the fall of 1998, in most cases for an anticipated four-year time span. Annual renewal, however, depended on the abilities of the pilot projects to meet their goals. At the end of the second piloting year (1999-2000), one contract was terminated, and a more appropriate project initiated with and beyond this particular consortium. Thus our third piloting year (2000-2001) renewed seven contracts, involving ten of the original institutions, whose participation has extended to the end of the fourth piloting year (2001-2002).

LOTF, with the close cooperation of the students and staff at the sustained projects, amassed both objective and subjective information and gathered both quantitative and qualitative data from 1998 to 2002.

The reporting requirements imposed on the pilots were considerable, for two reasons:

1. to ensure that public monies were in fact being spent appropriately, and
2. to permit us to explore whether the impact of diverse provisions was useful for pilot students and, if so, in what contexts and under what circumstances.

An emphasis on action research was essential to fulfill the LOTF mandate for the development and provision of provincial direction. Therefore we avoided sole attention to fiscal accountability, which, in our opinion would have been insufficient to address mandate accountability. At the same time, we avoided both experimental and purely academic models of research, since these would have been insufficient to attend ethically to student needs, while also fulfilling our mandate.

Pilot students proved to be very helpful to the work of the LOTF by conscientiously completing and returning questionnaires. The questionnaires, the process for data collection, including guaranteeing student privacy and data entry are described below. The results of the data collection and analysis are reported in Appendix A, attached to this report, entitled **Summative analysis of the information obtained from LOTF student questionnaires during the period September, 1998 to September, 2002.**

In addition to financial reporting required several times each year, the pilots were also asked to participate in common data collection and program evaluation exercises over the four year period. These are described briefly below. In addition, the results of the pilot institutions' internal data collection activities are contained in Appendix B, **Review and analysis of the data obtained from the institutional tracking questionnaires for pilot activity between September 1998 and June, 2002,** attached to this report.

In the second year of pilot activity, it became necessary to introduce a rigorous and controlled process for determining student eligibility for pilot participation. The validation process is described in this report in the section entitled "Identification Diagnosis of Learning Disabilities"(section I.7.) This process is one of the factors which made the LOTF research project unique in the field of learning disabilities research. At the same time it contributed to the accountability and credibility mandates of the work of the pilots.

Each pilot project was responsible for crafting a unique program evaluation method that met generally accepted standards for evaluation design, and permitted that design to reflect the particularity of each pilot and its institutional and community contexts. Reporting guidelines were provided, and interim reports were required for formative program evaluation several times a year. A final summative report of program evaluation activities was received from each pilot project in June 2002. Each of these reports contained a concise executive summary in which the pilot institutions were asked to describe their summative key findings of their entire pilot experience as well as their observations and recommendations. These executive summaries have been collated and are attached to this report as Appendix C.

Throughout the piloting period, arrangements were made for at least seven site visits to the pilots by each project's primary consultant. At these site visits we always met with pilot students and the pilot's staff and almost always with senior administrators, and teaching faculty. The value of these site visits was to supplement the essentially quantitative data obtained from the student questionnaires and the institutional tracking data with qualitative information. While the key findings and recommendations arising from the LOTF's research are fully supported by statistical data obtained from students and the pilot institutions, they are also based in part on the experiences and observations of the LOTF consultants as they visited the pilot institutions from time to time.

The consultant to LOTF's Chairman, with comment from the Consulting Team, prepared cross-pilot reports on institutional tracking and student questionnaires, while the four primary consultants prepared site visit reports. Based on all reporting and consolidated financial reports, Task Force activity was also reported annually to an external LOTF advisory body ("Committee of Reference") and to the appropriate Ministry.

There was frequent interaction between the Consulting Team and pilot staff, usually during site visits but also at periodic inter-pilot meetings ("Roundtables"), annual conferences (especially those initiated by two LOTF pilots and continuing on a post-pilot basis, at Cambrian and Georgian Colleges), by e-mail and telephone. In addition, over the four piloting years, forty bulletins ("Communiques") were prepared for and distributed to the pilots, to ensure timely and standardized communication.

The combination of common and unique evaluation features; of data collection and analysis, and experiential information that was content analyzed; and of narrative reporting from each pilot with inter-pilot and consultant interchange, along with periodic special studies, together facilitated quick adjustments if and where problems were occurring. At the same time, LOTF also focussed on the rapid identification and reinforcement of successful pilot elements, with a possible view to dissemination to other post-secondary education institutions for post-pilot activities. Student-centred focus of program evaluation was also sustained in several ways, and further protected by the possibility of direct access to the LOTF office and the consultants, should students express a preference to communicate in that mode as well.

I.2. The preliminary research, 1997-98

In order to achieve the goal of the Learning Opportunities Task Force, i.e. to provide unprecedented 'real help' for Ontario students with learning disabilities, the LOTF Consulting and Research Team began its work by initiating quantitative surveys and qualitative interview-based research to identify existing barriers to successful post-secondary educational experiences for these students.

Although the consultants who embarked on this research were well aware of the significant differences between the university and college systems in terms of structure, governance and funding, they also knew that the needs of students with learning disabilities are essentially the same in both types of institutions. Therefore, a single research summary report was created containing key points from the two separate reports on colleges and universities. The research identified current practices within the post-secondary education sector to serve students with learning disabilities and the barriers that these students identified to the consultants as hampering their educational and personal success.

The research also resulted in recommendations for exemplary practices and outlined a vision for an ideal post-secondary education program designed to meet the identified needs and delivering much needed accommodations and supports to students with specific learning disabilities. The vision statement was adopted by the LOTF.

The research consisted of four interview-based components comprising qualitative research and several quantitative components. Each post-secondary institution received a questionnaire for distribution to all full time faculty. French and English versions were distributed in accordance with the institutions' designations. The distribution and response rate varied from institution to institution, with colleges responding in much higher numbers than universities. In fact, a number of universities chose not to participate in this stage of the process at all.

A second, different questionnaire was distributed to the staffs of the Special Needs Offices. Responses to this were received from almost all institutions. In addition, the two Provincial organisations of special needs personnel, IDIA (Inter-university Disability Issues Association) and CCDI (College Committee on Disability Issues) met several times with Dr. Stephenson, Chairman of the Task Force and the researchers.

The interview-based research, completed at all the colleges and most of the universities, was conducted by site visits and by telephone. The four primary groups who participated in these interviews were (1) students at all site visit locations, (2) senior and academic administrators, (3) teaching faculty, and (4) special needs staff. All participants were asked to identify the barriers that they felt existed for students with learning disabilities at their institution. In addition, many of them offered recommendations for or described current exemplary practices for students with learning disabilities within the post-secondary sector.

I.3. The research findings

This summary of the research findings is based on the information gathered from all participants, including tabulations of the survey data and content analyses of the qualitative data. Particular emphasis was granted to student experience and perspectives.

The following summarises the key points identified through the research:

3. All universities and colleges in Ontario reported that they provided services to students with learning disabilities through their Special Needs Offices. The staff of the Special Needs Offices were variously viewed as knowledgeable, supportive and caring to indifferent to being part of the problem.

4. There has been no formal evaluation of the work of the Special Needs Offices. Other than the statistical information provided to the Ministry of Education and Training at that time and now to the Ministry of Training, Colleges and Universities on the numbers of students served by the special needs offices and a general description of the services provided, the institutions do not report on their work with students with learning disabilities.

5. There was quite limited research-based information available about what accommodations or support services work for whom.

6. All colleges and universities stated that they comply with their obligations under the Human Rights Code. Most have and had at that time a written special needs/accommodation policy, or at least a mission statement of intent. This statement or policy sometimes exists without Senate or Governing Board approval or any intrinsic institutional accountability mechanism. This sometimes means that it is not implemented by staff. The information about this policy was frequently not provided to high schools, to students or to faculty.

7. Based on the feed back provided by students and other information gathered, the institutions at that time could be divided into four categories in relation to their service delivery. These were:
   a) poor or unacceptable service delivery, which was marked by indifference to student concerns, ineffective or token interventions, assembly line accommodation, inequitable services and a general depersonalisation;
   b) insufficient service delivery marked by considerable barriers, hit-and-miss, uneven or unpredictable supports, problem-solving and accommodations;
   c) supportive service delivery characterised by most students reporting solid, caring, effective supports in resolving or reducing barriers and individualised approaches to problem-solving and accommodations;
   d) fully supportive service delivery pertaining to those situations where, in spite of there still being barriers, the students feel extremely well supported and were able to comment on their positive approaches to learning as well as enhanced self-respect.

8. Faculty responses to the surveys indicated an apparent willingness to learn and an openness to the idea that students with learning disabilities require special help. Some professors openly acknowledged that they are uncomfortable with their level of knowledge of how a learning disability is diagnosed; the reasons behind certain accommodation requests; and their own rights and responsibilities. At many institutions, however, there were a small number of extremely vocal faculty members who adamantly opposed the provision of academic accommodations. At universities, they often cited their right to academic freedom and freedom of speech to question the existence of learning disabilities. A minority of faculty at both types of institutions even questioned the rights of students who are "supposedly learning disabled" to attend university or college. Many of these faculty focussed on their own rights and justified their denial of requested accommodations to these students in the guise of fairness to all.

9. Where the institution reported senior administration support for students with special needs and the work of the Special Needs Office, the attitude of faculty and the services available to students with learning disabilities were significantly better, than at institutions without such support.

10. In focussing on barriers, it was surprising to note that special needs personnel tended to rank student based problems such as the lack of self-advocacy skills, inappropriate study/learning skills, inadequate understanding of and ability to explain their learning disabilities and inappropriate course choices as more significant than any institutional or faculty barriers. Faculty also noted that students with learning disabilities lacked the ability to adequately explain their condition and academic needs, and cited this as being a barrier both to believing that a learning disability exists, and to providing proper academic accommodations.

11. There was universal agreement that inadequate or incomplete documentation of having learning disabilities was a major barrier to student success. Assessments, where available, often failed to identify the student's strengths and weaknesses and how these effect learning. Consequently, assessments often do not provide information about appropriate accommodations. The fact that there are still no established and agreed upon criteria for what must be included in a learning disability assessment within the school system means that many students arrive with abysmal, inadequate, difficult to decipher assessment reports which may or may not actually diagnose a learning disability.

12. The greatest barriers cited by all groups interviewed were the lack of transitional support for students as they move from high school to college and university, coupled with the lack of compliance by school boards with their legislated mandate to identify and meet the needs of students with learning disabilities. Students are frequently unprepared for the more challenging academic environment of post-secondary education. They are often reluctant to disclose their learning disabilities, because of ostracism and negative stereotyping that they had experienced in their secondary schools, even if that meant that they cannot receive much needed accommodations in college or university.

13. The students who were interviewed presented an impassioned view of continuing personal difficulties in having their needs met, in spite of institutional claims of great progress. They sometimes expressed feelings of shame and embarrassment when dealing with faculty who expressed scepticism about their documented accommodation needs.

14. Student access to adequate funding support was frequently identified as another clear barrier within the post-secondary sector. This was and still is sometimes exacerbated by the need to modify course loads. The many changes during the past few years related to student loans and other funding available for post-secondary education and for students with disabilities are not adequately understood by many students or in some cases by the personnel in the institutions, whose job it is to help the students deal with these issues. In some institutions the level and type of service delivery was seen as being driven by the student's ability to pay rather than by his or her learning needs.

There were numerous recommendations received for exemplary practices. Based on these and the above findings, the researchers submitted the following recommendations to the Chairman of the Task Force:

1. That the pilot programmes implemented in September, 1998 be focussed on meeting and accommodating the needs of participating students with learning disabilities.

2. That any future decisions about post-secondary education for students with learning disabilities be based on the results of the LOTF research and the evaluation of the anticipated pilot projects.

3. That in addition to establishing a series of recommendations for exemplary practices, minimum service delivery standards for all post-secondary education institutions be developed, including provisions for monitoring and ensuring compliance.

4. That these standards be based upon a guarantee of adequate, predictable and sustained funding.

5. That these standards include recommendations for the work of the Special Needs Offices, including qualifications of special needs personnel, in order to ensure that students have access to consistent supports and services, should they move from one institution to another.

6. That the Task Force recommend to the (then) Ministry of Education and Training that accountability measures be introduced to ensure compliance by school boards and post-secondary education institutions with their legislated mandates for serving students with learning disabilities.

7. That the Task Force recommend to the (then) Ministry of Education and Training the establishment and implementation of transition planning and programming for all exceptional students and in particular those who have learning disabilities, as part of its current secondary school reform process.

8. That the Task Force recommend to the (then) Ministry of Education and Training that it review the issues raised by this research report, including, but not limited to, staffing and funding of post-secondary educational institutions, best practices within special needs offices and the availability and provision of professional development to staff within the institutions.

9. That the Task Force undertake or promote research into and make recommendations for appropriate action on key issues for students with learning disabilities, including, but not limited to: access to and portability of appropriate diagnostic assessments; funding supports; availability of training in learning and coping strategies, self awareness, self-advocacy skills and related life skills and a framework for determining and delivering needed individualised appropriate accommodations. All of these initiatives should include appropriate evaluation and accountability measures.

It is interesting to review the research findings and recommendations after four years of pilot activity and to compare them to the final key findings of the LOTF.

I.4. The LOTF vision statement

Students with specific learning disabilities are able to succeed in the post-secondary educational sector, provided that they have access to the key components which will allow them to reach their potential and achieve their goal. To determine what these key components are, the research team began by examining the needs of students with learning disabilities. Once these needs were identified, it was then appropriate to determine what supportive institutional and systemic components were required.

Based on the initial research, LOTF determined that indicators of success for students with learning disabilities in the post-secondary education sector are:

(i) entry into an academic program of the student's choice, provided that the student meets standard entrance requirements;

(ii) successfully meeting the essential requirements of the program, although the manner in which the student demonstrates mastery may be altered by academic accommodations, programme modifications or the use of coping and compensatory strategies, but with no changes to standards or outcomes;

(iii) graduation from the program of the student's choice;

(iv) possessing the requisite skills to pass any licensing requirements, with appropriate accommodations, if needed, relating to the field of study or career that he or she has chosen;

(v) being employment ready;

(vi) being sufficiently job ready that he or she can advocate for any job accommodations that may be required in order to obtain and maintain employment.

The consultants commented further that some students with learning disabilities will go on to further education, in which case they need to be able to advocate for accommodations needed in an educational setting, instead of focussing on employment and job readiness. Given the level of unemployment among young people, the LOTF chose to state that while gainful employment upon graduation was desirable, it was not included as a realistic success indicator.

To facilitate successful entry into and completion of post-secondary education, students must have the following:

1. An adequate diagnosis of their learning disability, in accordance with the standards recommended by the Ontario Psychological Association, which includes an up-to-date description of functional skills, strengths and difficulties, recommendations for learning strategies and academic accommodations as well as a listing of useful coping and compensatory strategies.

2. It is important that the student understand all of the components mentioned above, such that he or she is "the expert" on his or her learning disabilities and what he or she will need in terms of modifications and accommodations, to be successful at college or university and beyond. This also calls for programming to assist students in learning how best to explain their learning needs.

3. Access to transition planning and programming, which ensures that the student is ready for post-secondary education, including the ability to select appropriate courses to meet his or her goals, in terms of interests, graduation and future employment.

4. Adequate levels of basic knowledge and skills (or suitable coping strategies to compensate for any gaps) to be able to use the resources available in the post-secondary sector, without having to rely on ongoing remediation or 1:1 tutoring throughout the period of post-secondary education.

5. An understanding of his or her learning style, metacognitive strategies and potential.

6. A knowledge and understanding of and access to accommodations, assistive devices and adaptive technology which will enable him or her to achieve. This would include knowing the situations in which they may or may not require the use of certain accommodations or coping strategies.

7. Ongoing monitoring and tailoring of the type and amount of academic accommodations provided, with the intent of teaching each student the limits of his or her disability. At present, many students have not learned to be efficient test takers and so may need to ask for a greater amount of assistance than their learning disabilities would really call for.

8. Access to the necessary support system to deal with non-academic issues, i.e. access to counselling around decision making, problem solving, life skills and training in skills such as disclosure, self-advocacy, reframing, etc. Developing a Learning and Employment Assessment Profile (LEAP) would be a useful step in this regard. (LEAP is a self-help manual written by Eva Nichols for the Learning Disabilities Association of Ontario to assist adults with learning disabilities. It is available in both English and French.)

9. Access to a useful academic support system such as mentors, role models and academic advisors as well as the more usual accommodation related support system, such as tutors, note takers, readers and computer support staff.

10. Access to individualized, modified and small group learning opportunities, such as small classes, tutorials, seminars, well staffed reading and writing labs, well staffed math and computer labs, and being taught by faculty, teaching and research assistants who have some knowledge and understanding of learning disabilities and how this particular student with a learning disability learns.

11. Access to a suitable and flexible level of individualized funding support, such that he or she can focus on academic progress, without constantly having to worry about money. Such funding must enable the student to pay for any accommodations and supports which have a cost attached to them as well as being able to carry a manageable course load, without jeopardizing their current or future indebtedness.

12. Access to appropriate co-operative education or workplace experiences, whenever these are part of the usual course of study.

13. Access to appropriate future planning and an exit strategy, based on his or her goals and prospects, rather than a generic system-wide approach.

Although this vision statement was primarily student focussed, it also included, for further discussion, recommendations for institutional components and systemic changes, that would facilitate the necessary changes for students with learning disabilities. However, the primary purpose of the vision statement was to assist the LOTF in selecting the pilot projects for funding.

I.5. Putting the work of LOTF into a legislative context

While the LOTF is an arms' length government funded initiative, with the available funding providing an incentive for participation by colleges and universities, it is still important to examine the legislative context in which these institutions and their faculty and staff were asked to enhance their services and meet the needs of their students with learning disabilities.

For the past twenty years Ontario has had in place two very important, relevant and effective pieces of legislation.

The first of these is the ***Ontario Human Rights Code***, which mandates (among other things) the elimination of discrimination and the establishment of appropriate services and accommodations for persons with disabilities including learning disabilities. This ***Code*** is augmented by the ***Policy and Guidelines for Assessing the Accommodation Requirements of Persons with Disabilities***, which includes a requirement that appropriate accommodations must be provided for persons with disabilities in a manner which most respects their dignity and which is based on their stated needs. Individuals and institutions may only deny such accommodations, if the accommodation represents "undue hardship" for the individual or institution. Undue hardship may be claimed on the grounds of excessive costs, as defined in the Guidelines and/or endangering the safety of individuals or groups. In an educational setting, undue hardship may be claimed on the grounds of maintaining the integrity of the programme or the institution. However, it is important to note that the traditionally cited issue of "academic freedom" for faculty is not enough to claim undue hardship and deny accommodations to students with disabilities.

The Ontario Human Rights Code draws its mandate from the Canadian Constitution and the ***Charter of Rights and Freedoms***, where protection from discrimination on the grounds of disability is included with protection for age, gender, language, religion, ethnic origin and sexual orientation. The inclusivity of protection against discrimination on multiple grounds does not permit a negative systemic response to any member of any one of these protected groups. This is the strength of this legislation.

In other jurisdictions where there is disability specific legislation in place, such as the ***Americans with Disabilities Act*** in the USA, the Disability Discrimination Acts in the UK and in Australia, it is possible to amend the legislation related to persons with disabilities without impacting the lives of other equity seeking groups. This separation can and has occasionally resulted in negative outcomes for persons with all or sometimes one particular disability. For example, the results of the famous class action suit against Boston University created significant problems for students with learning disabilities and established a negative precedent for the accommodation of students with learning disabilities within the post-secondary sector. In Ontario such a decision is much less likely to arise. In fact, the Supreme Court of Canada in several recent judgements has strengthened the systemic obligation, both Federally and Provincially, to support and accommodate persons with disabilities. These include *Eldridge et al v. the Attorney General of British Columbia*,1997 and *BCPSERC v. BCGSEU (Meiorin)* 1999.

The second component of the legislative context in which the LOTF embarked on its work is the special education provisions of the Ontario ***Education Act***. The ***Act*** mandates the provision of appropriate special education programmes and services to **all** students with special needs. This legislation has been recognized as one of the most progressive in the English speaking world. On the basis of this legislation, approximately 8% of Ontario's elementary and secondary school students receive special education services and programming. More than 50% of these students are identified as having learning disabilities. However, in spite of the very progressive legislation, many students "fall through the cracks", when it comes to appropriate identification, programming and accommodation.

It has become clear that good legislation does not automatically result in appropriate services, supports or programming. As a result, LOTF has found it necessary to comment to the Ministry of Education on the gaps in implementation of the legislation on a regular and ongoing basis. In addition, LOTF also communicated directly with all school boards and secondary schools in the Province, letting them know about the pilot projects, LOTF's mandate and also the requirements for post-secondary eligibility for students with learning disabilities. Regrettably, there was virtually no acknowledgement or response from the school boards.

All the pilot institutions have included transition support for incoming students in their project offerings. This included communication with school boards and schools within their immediate catchment area. While this has resulted in some improvement in the documentation of learning disabilities for some students in some schools, there has been no noticeable Province-wide systemic gain in this area.

The 1992 ***Report of the Ontario Interministerial Working Group on Learning Disabilities*** identified that people with learning disabilities faced significant discrimination in terms of their access to certain Government funded and mandated services and supports. The report stated that "inequality was the current reality for people with learning disabilities in Ontario".

That report, based on four year's work between 1988 and 1992, primarily focussed on the status of adults with learning disabilities. This focus included post-secondary education, access to vocational rehabilitation, training and certain employment related funding and support provided by the Government to persons with disabilities. The report noted that the level of discrimination faced by so many people with learning disabilities in Ontario was due to a large extent to the lack of knowledge and understanding of learning disabilities among service providers, including educators. Further, that there was significant skepticism about learning disabilities being a "real disability", in spite of its inclusion in the definition of disabilities within the ***Human Rights Code.***

This was (and to some extent still is) of particular concern in the university sector, where many faculty members still believe, erroneously as we know, that learning disabilities must be synonymous with low intelligence.

In response to these findings and the general level of concern related to the post-secondary sector's responsiveness to the needs of students with disabilities, the Government of Ontario established a process for funding the Special Needs Offices of all post-secondary educational institutions. This funding is separate from the funding of colleges and universities in general and must be tracked separately. Regrettably, there are no comprehensive meaningful accountability measures in place to track these services or allocation of funds. All institutions report that between 40 and 50% of their special needs students are students with learning disabilities and that students with learning disabilities are consistently the largest single group of students with disabilities served by their institutions. However, many of the institutions have also claimed that, in spite of their legal obligations under human rights legislation, they have not been able to provide some of their students, especially those with complex and/or severe learning disabilities, with the full range of services, supports and accommodations that they need in order to be successful in their post-secondary educational studies.

The establishment of the Learning Opportunities Task Force together with the work of the pilot institutions has addressed these concerns in a credible and accountable manner. At the same time the two professional student service organizations, CCDI and IDIA, have also advocated for systemic changes, which will allow their institutions to meet their legislated human rights mandates more effectively and serve their student with disabilities more appropriately. The initiation of the Enhanced Services Projects at all publicly funded colleges and universities as of September, 2002, the result of LOTF's interim recommendations to the Government, has extended quality provisions even further.

During the past four years, LOTF has undertaken several systemic advocacy tasks on behalf of students with learning disabilities. These have included responses to the consultations on the education funding formula, education and disability issues initiated by the Human Rights Commission and others.

Throughout its existence, LOTF participated fully in all available discussions and consultations related to the introduction of the ***Ontarians with Disabilities Act (ODA)***. It was LOTF's recommendation and expectation that the Government would introduce meaningful and accountable legislation that would offer protection to all persons with disabilities and which would fully complement and supplement the rights guaranteed to persons with learning disabilities under the ***Human Rights Code***.

The current ODA, in our opinion, will not achieve these goals, partly because it appears to focus almost exclusively on physical access in its definition of accessibility, it only applies to the public sector and because there are too many loopholes in its compliance measures. There are no regulatory directions about the implementation of those components of the ODA that have received proclamation. The recently released guidelines for the ODA Accessibility Plans within the post-secondary education sector do nothing to address LOTF's concerns and in their current state will not achieve what is needed to accommodate students with learning disabilities in the colleges and universities of Ontario, in spite of the fact that this population makes up close to 50% of the total population of students with disabilities. This is the rationale for the recommendations related to the ODA in the listing of LOTF recommendations, flowing from LOTF's key findings.

I.6. Initiating the pilot projects

After its preliminary research and review period, the LOTF invited proposals from every community college and university in Ontario. The institutions were not given explicit directions for the program and project components that the Task Force was interested in funding. Instead, they were told to propose projects which would contribute towards meeting the LOTF's mandate and meet the needs of their students with specific learning disabilities. All interested parties were informed that to be eligible for participation in the newly created pilot projects, pilot students must satisfy the following diagnostic/definitional criteria for learning disabilities:

- learning disabilities are neurologically based information processing deficits;
- they occur in individuals with average to above average intelligence;
- they typically cause a discrepancy between the individual's potential and achievement, although they should not be diagnosed purely on the basis of such a discrepancy;
- they are a life-long condition, manageable with appropriate supports and direction;
- they are to be diagnosed by a registered psychologist or an appropriately qualified professional, using a battery of tests.

The proposals were reviewed by the consultants as well as an external committee of experts in the field, the Task Force's Committee of Reference. (For a list of these individuals, please see the back of this document.) The 35 proposals received from the 47 potentially eligible post-secondary educational institutions were reviewed in a "blind" format, i.e. with all identifying information removed. On the basis of further review, research and clarification, LOTF established 8 pilot projects in 13 post-secondary educational institutions.

These eight pilot projects were as follows:

- **Expanding Horizons: Transition to College for Students with Learning Disabilities** and a summer orientation program at Cambrian College in Sudbury;
- **Learning Opportunities Program** at Conestoga College in Kitchener-Waterloo;
- **Millennium Centre** at Fanshawe College in London;
- **Centre for Access and Learning Disability Services** at Georgian College in Barrie, Orillia and Owen Sound;
- **Learning Opportunities Program** at the University of Guelph;
- **Project ADVANCE** summer orientation program and **mature student PATH** program at York University in Toronto;
- **Virtual Centre of Excellence for Learning Disability Integration**, English consortium: Trent University in Peterborough, Loyalist College in Belleville, Nipissing University and Canadore College in North Bay;

- **Reussir ses Etudes Collegial - Troubles D'Apprentissage**, French consortium: College Boreal in Sudbury, La Cite Collegiale in Ottawa, College des Grands Lacs in Toronto and its environs.

Students first entered these pilot projects in September, 1998.

After two years it became clear that the French language project, delivered at three French language community colleges was not meeting its mandate, due primarily to the lack of adequate assessment tools for the diagnosis of specific learning disabilities. As a result this pilot was discontinued. To address the problems demonstrated by the Francophone project, the Task Force has since embarked on the development, standardization and norming of a French language diagnostic battery for the assessment of learning disabilities. This is the French Language Assessment Project.

The remaining seven projects, involving six community colleges and four universities located throughout Ontario, continued their work into 2002. One pilot, the one located at the University of Guelph, is completing its mandate during the current academic year and will report on its final findings in the summer of 2003.

During the past four years 1242 students who met the very rigorous LOTF participation criteria received pilot services and participated in the pilot projects' evaluation. This made the LOTF project the largest applied research project of its kind in the learning disabilities field. The pilot projects selected were diverse in their content, their specific program offerings, locations and languages of instruction. It was felt that such diversity would enable the Task Force, through its ongoing programme evaluation and tracking processes, to determine what works well for post-secondary students with specific learning disabilities. However, in order to achieve some consistency in their evaluation measures, they all utilized the LOTF's guidelines for program evaluation including the student success indicators, contained in the LOTF vision statement.

I.7. Identification and diagnosis of learning disabilities

All pilot institutions determined student eligibility for participation through the rigorous diagnostic validation criteria introduced by the Task Force. This process is described below, while the full validation document is included in the accompanying technical report.

The pilot institutions' reported experience throughout the four years of pilot project implementation confirmed early indicators that many students (over 80% of the pilot students) arrive at college or university with inadequate documentation of their learning disabilities. This is in spite of the mandated identification and special education service provision of Ontario's Education Act.

Others, although they may have some relevant documentation, cannot satisfy the expected eligibility criteria for participation in the pilot project, without undergoing further assessment. The students themselves consistently indicated to the Task Force consultants that in many cases they had only quite limited knowledge and understanding of their learning disabilities or of the impact on various aspects of their lives that those learning disabilities have now and may continue to have in the future.

It was due to these observations and the accountability and credibility mandates that the Task Force and the pilot projects were expected to meet that it became necessary for the Task Force to develop a process, whereby the eligibility of students to participate in the LOTF funded pilot projects could be validated.

It is important to note that the primary purpose of this process related to ensuring that all participating students would meet the Task Force's rigorous eligibility criteria for identifying students with specific learning disabilities. Since this was an applied research project rather than just the review and observation of service delivery initiatives, the criteria for eligibility were more rigorous than is generally the case in the identification and diagnostic process.

The validation process was **not** directed towards the elimination or modification of the "learning disability" label, as it is used and applied by appropriately qualified professionals. We have ample evidence that false delicacy on the part of the school system to avoid labelling has a terrible impact on students with learning disabilities. It is well known that identifying terminology is an essential component of ensuring the provision of ongoing appropriate programming, services and accommodations to students with disabilities. Therefore, the concern is not the "label" itself, but rather whether it is accurate and is accompanied by recommendations for matching appropriate interventions.

Nor was the intent to eliminate or reduce the level of service provision by the Special Needs Offices (or Offices for Students with Disabilities) of all universities and colleges to their SLD students designation. The process was designed solely to ensure the validity and the accountability of the pilot population selection.

In determining the eligibility of a student for the pilot project, pilot institutions were expected from their second year of functioning to ensure that the student's current assessment met the following adequacy criteria.

- **A qualified professional has conducted the evaluation.**

The only professionals who are permitted bylaw to diagnose a Learning Disability are: Registered Psychologists, Registered Psychological Associates to whom the ability to diagnose has been delegated and Psychological Associates supervised by a Registered Clinical Psychologist. Please note that not all psychologists, even those who have a PhD degree, are registered with the College of Psychologists.

- **Testing is current.**

For individuals under age 18, this generally means the testing occurred within the past 3 years. Testing performed after age 18 is usually considered adequate in terms of recency, regardless of the current age of the student. However, all testing must meet the criteria outlined here.

- **The documentation is comprehensive.**

This MUST include all of the following components unless a rationale is provided for why certain components were omitted. For instance, "math was not assessed because this has always been an area of strength", or "memory does not appear to play a role in his underachievement and was therefore not tested".

  - **Report includes information about educational history**
  - **Report includes information on medical/developmental history**
  - **Report includes appropriate measures of aptitude/cognitive ability**

This last item called for testing using one or more of the following testing instruments: WAIS-R or WAIS-III, WJPB-R or WJ-III Cognitive, Stanford-Binet (4th ed), Kaufman Adolescent and Adult Intelligence Test. In determining what tests to use, professionals will rely on the technical adequacy, reliability and validity of the tests. The professional judgement of the evaluator is a key component in determining the tests which are used.

- **Overall intellectual ability falls in the average range or above.**

For the purposes of the LOTF's research project, average was determined as an obtained Full Scale IQ score of **90** or better. It may be indicated as being at the 25th percentile or higher. If the score was less than 90, but the student is diagnosed with a learning disability, an explanation MUST be included of why the obtained IQ score is not indicative of actual ability. Many psychologists will use the one standard deviation from the mean criterion for defining average I.Q. for the purposes of diagnosing learning disabilities. That means that they will indicate that a Full Scale I.Q. of 85 is the required (low) average score. For the purposes of this project because we were dealing with students who are attending post-secondary education, we chose to use the higher figure of 90. As noted, however, psychologists did find from time to time that certain individuals with learning disabilities fell below this cut off due to severe discrepancies in subtest scores.

- **Report includes appropriate measures of academic achievement.**

Many achievement tests are available, such as the WIAT or WJPB-R or WJ-III Achievement. In addition, specific tests of academic skills could be used in combination, such as Test of Written Spelling (TOWS), Nelson-Denny Reading Skills Test, Canadian Adult Achievement Test-D, Test of Written Language-2 (TOWL-2) etc. could be employed.

Please note that the Wide Range Achievement Test (WRAT) is **NOT** a comprehensive measure of achievement and therefore is not useful as the primary measure of achievement.

- **Report includes appropriate measures of information processing.**

This includes tests such as: Detroit Test of Learning Aptitudes (DTLA-3 or DTLA-A), Wechsler Memory Scale (® or III), WJPB speed of information processing subtests, or tests of executive or motor functioning.

- **Evidence that a significant discrepancy exists between aptitude and the actual scores obtained on tests measuring achievement *or* information processing.**

The discrepancy may be calculated in a number of ways:

- A discrepancy of 1.5 standard deviations (SD) or greater between Full Scale IQ and obtained achievement score.
- A discrepancy of 1.5 SD or greater between one of Verbal Scale IQ, Performance Scale IQ or derived factor scores ONLY if evidence exists to justify the use of these, rather than Full Scale IQ, as the measure of intellectual potential.
- A discrepancy equal to 1.5 SD or greater using a regression formula for calculating the significance of a difference.

(Whatever the method used, a 1.5 SD must be clearly demonstrated between scores on tests of aptitude and actual achievement **or** information processing measures. Remember, however, that all the other criteria must also be true in order to ascertain eligibility for the pilot projects.)

- **Evidence that other possible explanations for the noted discrepancy have been ruled out** (such as emotional, psychological, cultural/linguistic, attentional, motivational, lack of appropriate education, health problems, etc.)

- **An indication of how the observed pattern of abilities and achievement demonstrate the presence of a specific disability.**

For instance, it was not sufficient to say that someone is a very slow reader. Evidence from the report must substantiate the underlying processing difficulty that **causes** the person to read slowly. For example, *"Sue has great difficulty associating symbols with the sounds they make. Visual memory is also substantially below expected levels. As such, automatization of the reading process is not complete, and she has difficulty identifying, recognizing, and sounding out words when reading. This slows down the reading process."*

- **Documentation includes a specific diagnosis.**

References to learning styles, learning differences, academic problems, underachievement, learning delays, etc., are **NOT** diagnoses. The evaluator should ideally use direct language for the diagnosis, avoiding indirect terminology such as "suggests" or "is indicative of". If the data clearly indicate that there is no learning disability present as the primary reason for the student's learning problems, the conclusion should include such a statement.

Following the submission of the validation information by the pilot institutions, the Learning Opportunities Task Force implemented an external validation process for supporting this initiative. During the fall of 1999, all pilot institutions completed validation checklists for their pilot students, who consented to such disclosure. The checklists did not identify the student by name. The validation results were provided to the LOTF consultants. LOTF hired two external validators, one English speaking and one English/French bilingual, who were legally qualified to diagnose learning disabilities in the Province of Ontario. These two individuals reviewed the validation checklists and the summary sheets for the pilot institutions. Subsequently, they visited all the pilot institutions to carry out a review of an appropriate number of randomly selected student files, again reliant on student consents, to validate the adequacy of the process, providing overview reports to the pilots and the Task Force.

This unique process was time consuming and at times difficult for the pilot institutions who were simultaneously delivering services to their pilot students. However, the overall results have supported the validity of the process and the accuracy of the Task Force data and findings.

I.8. Student numbers

All pilot institutions were asked to provide their primary consultant with annual reports on the validation status of their participating pilot students The students were categorized as follows:

- eligible, i.e. fully satisfying the LOTF validation criteria;
- ineligible, i.e., not meeting the validation criteria;
- pending, i.e. still awaiting an assessment, re-assessment or evaluation and eligibility determination by the institution's psychologist, psychological associate or other professional staff.

The data received from the ten pilot institutions were added to the existing data base. This enabled the Consulting Team to ensure that the reports that were prepared for the Chairman of the Learning Opportunities Task Force and the Committee of Reference and were submitted to the Ministry were based on data obtained from students who were eligible or were anticipated to become eligible for participation. If a student's eligibility status changed from "pending" to "ineligible", the questionnaires received from that student were removed from the main data base and were retained in a separate file.

In addition to the above three categories, students participating in the short term summer programs offered at Cambrian College and York University were exempted from the validation process.

During the first year of pilot activity, students were not expected to participate in a formal validation process. Once the formal validation process was introduced in the second year of the pilot projects, all students who continued their pilot project participation into the second year participated in the validation process. Also, some of the pilots retroactively pursued the validation determination of their first year students, even if those students did not continue into the second year. As a result, there are only 138 "first year" (i.e., pre-validation) students included in the database.

The number of ineligible students involved for at least some of the time with the pilots, but not meeting the validation criteria, was 302. For students who were listed as "ineligible", there were a number of possible reasons reported for this ineligibility. These included the following:

- the student did not satisfy the LOTF requirement for average intelligence, (25th percentile)
- the student did not demonstrate the requisite discrepancy between potential/ability and performance/achievement, (1.5 SD)
- there was another more appropriately determined reason for the difficulties demonstrated by the student, e.g., another primary disabling condition such as ADHD, cerebral palsy, etc.,
- the student chose not to proceed with the validation process,

- the student's academic difficulties were not due to any disability in spite of the fact that many of these students were identified as either LD or as having a communication exceptionality in the secondary school system.

On the basis of the above criteria, questionnaires from the following number of students are included in the database:

• eligible students	987
• first year students who did not continue	138
• summer students exempted from the validation process	117

This means that the database currently contains valid information received from a total of **1242 pilot students**. This number is certainly adequate to enable the LOTF to draw statistically meaningful conclusions and make appropriate recommendations for future action, which may be extrapolated as useful to students with specific learning disabilities throughout post-secondary education.

A note about the demographic data

Although there is no other study available with such a large number of students who have learning disabilities, it is important to note certain limitations related to the representativeness of the pilot student sample. This is due to the fact that most of the pilot institutions primarily serve a non-urban non-immigrant population. Other than York University's PATH project, none of the pilot projects were located in the largest urban centres of Ontario, i.e., the Greater Toronto Area, Ottawa or Hamilton.

Eighty percent of Ontario's population report English as their first language, with 6% reporting French as their mother tongue and the remaining 14% reporting "other" first languages. Of the pilot students at all pilot institutions over the four years of piloting 92% of the students reported that English was their first language. Four percent in total reported French as their first language, but this declined to 1% after the Francophone pilot was discontinued. It is important to note that the York PATH population confirmed the expected linguistic variation, with 16% of the students reporting a first language other than English or French.

On the other hand, it is interesting to note that while the most recent census data states that 2.4% of Ontario's population are Aboriginal, 5.3% of the pilot students self-identified as Aboriginal.

The last demographic statistical variation of note is that the pilot student population was made up of 46.5% females and 53.5% males. This almost evenly balanced gender distribution is substantially different from the incidence rates for learning disabilities reported by the school system, where males vastly outnumber females. However, other post-secondary studies looking at this population also show a much greater gender balance than is the case in the school system.

None of the above negates the value of the LOTF findings. However, it is important that further research be done to address the long term implications of these demographic factors.

I.9. Evaluation process

Programme evaluation was a key part of the Task Force's work. It consisted of gathering and analysing both qualitative and quantitative information, obtained from a number of sources. The purpose of all programme evaluation activities was to determine whether:

- the pilot institutions had been providing more effective and substantially different, preferably enhanced programs, services and supports to their students with specific learning disabilities than had been the case prior to the establishment of each pilot project at the host institution;
- the students reported noticeable improvements in their learning environment and identified individual successes over the period of their participation in the pilot project;
- the students and pilot staff reported individual and institutional progress towards the achievement of both student and institutional success and systemic changes, which were identified by the LOTF in the initial vision statement; and
- the funds spent resulted in meaningful change, a consistent achievement of the student success indicators and progress towards the mandate of the Task Force.

I.10. Student questionnaires

In order to gather information from pilot students, the Consulting Team developed and was using three different types of student questionnaires. These were:

- the intake questionnaire, which was distributed to every pilot student within 2 to 4 weeks of becoming part of a pilot project;
- the progress questionnaire, which each pilot student was invited to complete and return at least once a year and at least three months after completing the intake questionnaire; and
- the exit questionnaire, which was given to every student once he or she was preparing to leave the pilot project, though not necessarily the pilot institution or post-secondary education.

In addition, where students did not complete an exit questionnaire, the pilot institution's staff were asked to send in a very much briefer proxy exit form about the departing student's involvement with the pilot project.

The information gathered from these questionnaires was supplemented by the anecdotal information provided by students during the focus group meetings, when the consultants visited the pilot institutions at least once a year.

The purpose of these questionnaires was to obtain both quantitative and qualitative data and information about the pilot students, their opinions about their experiences as pilot students and their recommendations collectively. This information was key to the reports and recommendations developed by the consultants and submitted through the Task Force to the Government of Ontario.

The student questionnaires did not carry identifying information. Once distributed and completed, they were returned to the pilot institution in a sealed envelope, which guaranteed the students significant privacy. The sealed questionnaires were sent to the consultants for review and coding. From them, they were forwarded to the Task Force office for data entry. Data analysis on the basis of the questions asked by the members of the Consulting Team was then done by the consultant who was responsible for developing the database.

The summative analysis of the information obtained from the student questionnaires during the period of September 1998 to September 2002 is attached to this report as Appendix A. That report is based on the following number and types of student questionnaires:

Type of questionnaire	**Year 1**	**Year 2**	**Year 3**	**Year 4** (includes year 5 for York's summer program)	**Total**
Intake	285	263	266	155	969
Summer intake	(included in the above number)	26	31	40 (includes 2001 and 2002)	97
Progress	159	254	331	247	991
Exit	96	81	99	225	501
Summer exit	(included in the above number)	25	29	39 (2001 and 2002)	93
Exit proxy	-	24	129	273	426

This is a total of 3077 student questionnaires obtained from 1242 students. Copies of the questionnaires are included in the LOTF Technical Report.

The topics covered in Appendix A are as follows:

- An overview of the types and numbers of student questionnaires covered by this report, completed by eligible and exempted-from-validation students
- Basic demographic data for pilot students who entered the pilot projects during the past four years, met or were exempted from the validation criteria and completed intake questionnaires
- Student funding issues
- Information and data about the pilot students' studies at the pilot institutions
- The value of the pilots to responding students
- Previous schooling and related special education experiences reported by pilot students

- Self-awareness and self-advocacy skills as reported by the pilot institutions and by the pilot students

- Accommodations available and utilized within the post-secondary educational sector
- Utilization of the pilot project components

- Pilot students' future goals

- Leaving the pilots: data from the exit questionnaires and the proxy exit forms

- Looking at the summer orientation programs at Cambrian College and York University

- Conclusion

While some of the key information obtained from the analysis of student data is included in this report, readers are urged to read the complete student data report, presented as Appendix A. This will ensure that they will understand the LOTF's decision to place such great importance on student feed back.

I.11. Institutional tracking questionnaires

Twice each year the pilot institutions were asked to fill out an institutional tracking questionnaire. These questionnaires, nine in total, provided the Task Force with both quantitative and qualitative information about the work of the pilot institutions.

A consolidated report containing a review and analysis of the data obtained from the institutional tracking data for pilot activity from September 1998 to June 2002 is attached to this report as Appendix B. It summarizes the data provided by the pilot institutions about their activities, the numbers of students they worked with directly, demographic data about the students, the services the pilot institutions provided and the students' utilization of program components. In some cases, the pilot institutions were asked the same questions as the students. This permitted a balanced interpretation of responses to several subjective questions and enabled comparisons of student and staff reports about program component utilization rates.

The topics covered in the consolidated institutional tracking report, Appendix B, covering the period of September 1998 to May 31, 2002, are as follows:

- Student numbers
    - pilot enrolments
    - pilot exits
    - validation status
    - diagnosis and documentation
    - student questionnaires - distribution and return data
    - referrals to the pilots
    - incidence rates

- Student demographic data
    - gender distribution
    - course load
    - other relevant demographic information
    - categories of learning disabilities
- Program components and their utilization
    - assessments
    - self-awareness and self-advocacy
    - accommodations
    - program component utilization
- Conclusion

Similarly to the student data, some of the above components are described in this report. For example, the program components that were offered by the pilot institutions are described briefly within this report. However, in order to obtain a complete picture of the work of the LOTF and the pilot institutions, readers are once again urged to read the appended full report, Appendix B. A copy of the institutional tracking questionnaire used by the pilots throughout the piloting period is included in the Technical report.

I.12. Program evaluation

The projects were evaluated on an annual basis. Funding renewal was dependent on a number of factors, including a close review of regular interim progress and program evaluations, financial information and the rate of student satisfaction. In their reports, the pilot institutions described how they provided, tracked and evaluated the services, supports and accommodations to their eligible students in the manner that was approved in their annual business plan. The pilot institutions had to meet the reporting and other accountability related requirements of the Task Force in a timely and appropriate manner.

Each pilot institution designed and implemented its own internal program evaluation, consonant with its unique context, original and evolving institutional culture and pilot goals. LOTF provided a guideline for each evaluation cycle to ensure that each institution reported consistently on certain specified activities and project components. At the end of the fourth year of pilot activities, each institution submitted a summative tracking and evaluation report on its activities throughout the life of the pilot project. Although the University of Guelph is continuing its pilot activities for a fifth year, its primary evaluation of the program components has been completed. However, the institution will continue to track student participation and progress for the fifth year.

The executive summaries of these reports have been collated and are attached to this report as Appendix C. The guideline setting out LOTF's requirements for these reports is included in the technical report.

I.13. Pilot project components

In accordance with their original proposals, the ten pilot institutions delivered diverse services in somewhat differing modes. The purpose of the program evaluation was, at least in part, a determination of whether these different modes essentially led to the same outcomes or not. Two institutions' pilots were best described as **programs**, as they contained core and mandatory features beyond assessment and self-advocacy training, as well as optional elements. The other pilots provided an array of **services**, among which students made a selection in accordance with their specific disability, academic and developmental needs, their personal circumstances, and guidance from pilot staff. Over the four years of piloting, the pilot institutions modified their provisions based on student feedback and both internal and Task Force evaluations.

All of Ontario's publicly funded colleges and universities receive provincial funding dedicated to offsetting some of the institutions' costs for their offices for students with disabilities. The pilot institutions receive additional funds targeted to the Task Force mandate and the specific provision of enhanced or unique services and programs for eligible and interested students whose learning disabilities diagnoses have been validated, as outlined above.

It was therefore crucial to ensure that the pilot components and modes of delivering services by the pilot projects were in fact distinct from those routinely offered by the standard offices for students with disabilities. In the tracking of student usage rates of each pilot's components, it became evident that certain components were used more frequently by pilot students, some of whom rarely used other components. In addition, a small number of pilot students were making little use of any pilot opportunities in several projects.

The Task Force therefore helped the pilots refine their provisions, and all had, by their second year, formulated some mechanism to ensure that students would make sufficient use of the pilot to warrant their continued inclusion as pilot students. Those who were not interested in or unable to make commitments to a minimum participation level could be well served through the institution's generic special needs office, while the more expensive pilot components were streamlined, and better tailored to pilot student need and usage patterns. Other features of formative program evaluation were also helpful in thus refining program components.

The second year was also a period of consolidation and refinement for program modifications leading to greater consistency, which allowed for better tracking of student usage. We have included below a description of the major pilot components, offered by some, many and in some cases all pilot institutions.

There were four components that were common to all the pilots. These were:

- assessment for learning disabilities, including related student follow-up;
- self-awareness and self-advocacy training;
- training in learning and metacognitive strategies, offered by learning strategists with expertise in both learning disabilities and the field of learning strategies, and
- access to adaptive technology and other similar accommodations, which are selected to match the students' strengths and needs.

Throughout the piloting period it was obvious that the students valued the following program components, more than any others. These were:

- an appropriate diagnostic assessment of the student's learning disabilities;
- access to the supports that can be provided by an appropriately qualified and knowledgeable learning strategist, including clarification of the academic implications of the student's diagnostic assessment and the development and implementation of suitable accommodations and learning strategies that enable the students to achieve their goals;
- access to the services and accommodations made possible through the work of an assistive technologist, who is knowledgeable about learning disabilities and the ways in which the impact of learning disabilities may be ameliorated through the use of assistive technology.

The lack of access to adequate diagnostic assessments by students with learning disabilities is discussed at some lengths in the section of this report identifying the LOTF's key findings, recommendations, ongoing activities and legacies. Therefore, there is no need to cover this again in this section. Suffice it to say that access to diagnostic assessments and an appropriate explanation and utilization of the assessment findings and implications are the most important first step for students with learning disabilities to realize their potential and success within their post-secondary education. All other components depend on this.

The Enhanced Services Fund, announced by the Minister of Training, Colleges and Universities in February, 2002 for implementation in September, 2002 was established on the basis of the above findings. For a description of this initiative, please see section III.2. of this report.

In addition to the above components, pilot institutions offered the following to their pilot students:

- **assistive technology** (AT) support, with particular emphasis on computer support, usually provided in dedicated computer labs. This is augmented by the presence of assistive technologists who are skilled in AT **and** in working with students with specific learning disabilities. This component, the dedicated computer lab and the staffing, had emerged as highly valued by most pilot students. While there was some variation in service delivery of this component, all pilots had enhanced their provisions in this area. Students generally found it more helpful to have access to dedicated space, rather than work stations in a more generic computer lab. All the pilots developed expertise in supporting students in utilizing technology to help them compensate for the impact of their learning disabilities. In addition to in-house activities, all pilots offered community open house events as well as professional development to teachers in their local school boards.

- **specialized academic credit** courses and **college success** courses were usually available only to pilot students. In some cases these were also accessed by a small number of other students with learning disabilities. These included adapted English college courses, delivered in distinctly different ways, and trans-disciplinary courses, usually credited as part of the colleges' requirements for credits in general education (liberal arts options) or, at the university level typically linked to the Psychology Departments or Faculties of Education. These latter courses generally focussed on knowledge about learning disabilities, including self-knowledge and linkage to self-advocacy and academic skills supported by AT, accommodations, metacognition and learning strategies. Others focussed more specifically on future planning, e.g. transitions from post-secondary education to employment.

- **individual counselling**, a program component widely used by students, was usually of a pre-academic, academic or pre-vocational nature and focussed on specific learning disabilities related issues rather than therapeutic or emotional counselling. All pilots had the ability to make referrals to campus counselling offices or to off-campus, community agencies, if their students needed psychotherapeutic resources. Pilot counselling was usually provided by learning disabilities specialists, and positive student feedback was notably high. The students particularly praised opportunities for ready access, staff flexibility and warmth, the availability of moral and practical supports from staff who are clearly knowledgeable about learning disabilities. Staff sometimes built a professional relationship with the student over several years, adjusting the level and type of counselling support in accord with the student's gains in independent functioning and challenges presented by new stages. This component was sometimes linked with others, such as **individual advising, program planning** and **goal setting; specialized communications supports** and **social skills training**.

- **transition supports for entry to post-secondary education** were available at all pilot institutions. These varied quite widely across pilots. Formats ranged from specific summer programs at some pilot institutions to outreach to local schools and school boards to facilitate more effective transition practices. The summer programs included:
  - an eight day congregated orientation to college, designed to give new arrivals a head-start on adjusting to the new demands of post-secondary life, to promote early and more timely usage of special needs supports, and to diminish early isolation, with early indicators of retention benefits;

  - an intensive six week summer orientation to post-secondary experience, provided at a single pilot university though students went on to begin their first year at many different universities and colleges. This project had many early indicators of positive academic and retention impact. It included liaison activities with catchment area secondary schools and community referral agencies and an array of social events, publications and outreach communications, "open house" welcoming activities, computer lab community evenings, presentations to high school teachers, to qualifying special ed teachers and student teachers to assist them in enhancing appropriate transition planning for all students with learning disabilities. On the basis of this model, LOTF is funding seven additional diverse summer transition programs for the summer of 2003.

  - trials with briefer time spans for orientation activities had also been explored.

- **academic and other accommodations**, which the Task Force tracked from both staff and student perspectives. These went beyond the standard accommodations provided by all post-secondary offices for students with disabilities; for example, the ability to integrate

AT into academic testing centres enhances student independence and demonstration of prowess without dependence on staff who read and/or scribe exams. Specific systemic changes and **service accommodations** provided supports to students with learning disabilities who were particularly vulnerable to bureaucratic hurdles in registrars' and student funding offices. **Specialized peer mentoring and tutoring services** provided more timely and better mentor and tutor matches, often with guidance from learning strategists who were part of pilot staff teams.

- other components included **transition supports for exit from post-secondary education**, either to the next level of academic or vocational study, or to the work world. This included supported participation in field placements and co-operative education opportunities. This was a program component that was utilized by fewer students than would have been expected and requires further exploration.

- Some pilots provided **peer and/or self-help support groups**, including one pilot project's intensive development of a peer support group amongst pilot students initiated in the fall term by an overnight retreat, and sustained through weekly evening meetings.

- There were other **adjunct supports** that benefit students either directly or often indirectly. For example, all pilots offered **professional development for faculty** and staff on campus, and outreach and education programs to serve students, parents, schools and other agencies in their regional communities. Both these initiatives were less effective than the pilot institutions and LOTF had originally hoped, with several notable exceptions.

- During the second year of pilot activity, the pilot institutions were asked to enhance their focus on developing their pilot students' **self-awareness and understanding of their learning disabilities** and **self-advocacy skills**. Research shows the importance of these dual skills for the academic success and future lifelong independence of persons with learning disabilities. Some of the pilot institutions chose to utilize the ***Learning and Employment Assessment Profile*** (LEAP), available from the Learning Disabilities Association of Ontario. This is a guided self-help manual, specifically prepared for adults with learning disabilities, using the principles of consumer empowerment, enhancing resilience and learning to reframe the learning disabilities experience into a more positive approach. Others developed their own resources. In some cases, these were formally structured activities, while in other cases, self-advocacy training was embedded in other components.

II. Articulating the LOTF's key findings and recommendations

> ***"I don't want you to shut this program down after it is over because it get the best out of people, both student, teacher and the staff of the center. I do not feel stupid anymore. I feel equal. The pilot project help me receive my diploma and now I am on my way to a post diploma. I like to say thank you to all involved."***
>
> **Pilot student quote**

The accountability measures implemented by the LOTF have already resulted in some notable systemic changes within the post-secondary education sector. Ontario's colleges and universities and the services and supports that they provide to their students with specific learning disabilities will never be the same as they were before the establishment of LOTF. The LOTF is very satisfied to be able to report that some significant systemic changes have begun to be implemented. Much of the credit for these goes to the pilot institutions and their staff, who, in addition to the work that they have been doing at their institutions, have also been sharing exemplary practices, resources and ideas with their colleagues throughout the post-secondary education sector.

The pilot projects succeeded due to a number of noteworthy key factors. They selected their students carefully and nurtured the students' successful participation within the pilot projects. At the same time, our large group of committed and hard working students realized the value of these projects not just for themselves but also for those who will come after them and will be looking for supports for their learning disabilities. Their responses to and participation rate in the LOTF tracking, reporting and evaluation expectations have been unprecedented.

Thirdly, but very importantly, the selection of the pilot institutions reflected the excellence of the initial proposals **and** the willingness of each of the institutions to participate in all aspects of the work. LOTF sought "fertile ground" to establish its pilot projects and found it in the ten pilot institutions. This does not mean that there were no other institutions where similar pilots might not have been successful. But what is important for considering the LOTF's key findings and recommendations is the recognition that initiatives such as these pilots do require institution-wide support and commitment. Yes, the LOTF provided financial and moral incentives, guidance and ongoing support. Nevertheless, this could have proven to be insufficient. The staff of the Special Needs Offices cannot work in isolation. They need to feel that there is systemic support for what they are doing and that their work and the success of all students at the institution, including students with disabilities, is a shared value throughout the institution.

However, in spite of all these new and positive trends within the post-secondary sector, there is still much to be done to improve the transition process for students with specific learning disabilities as they leave the secondary system for post-secondary education or employment. We also cannot state that everything that is possible has been done within the post-secondary sector or even that we know everything about the needs of students with learning disabilities and how those needs can be met in such a way that every student will realize his or her full potential. This is why the recommendations also suggest ongoing research, exploration and collaborative activities. That will ensure that Ontario will be able to build upon what has been accomplished by the LOTF, the pilots and participating students over the past five years.

Based on the data provided by the students and by the pilot institutions, the qualitative information gathered from all participants and the numerous evaluation reports, the LOTF arrived at its seven key findings. These key findings have led to the development of twenty-four recommendations that the LOTF is offering to the Government of Ontario.
Each of the key findings is supported by relevant data obtained primarily from the student questionnaires and occasionally from the institutional tracking questionnaires as well as the consultants' observations at the site visits. The recommendations generated by the key finding follow, together with some explanatory or clarifying comments. While these are not implementation plans as such, they offer a direction to those who will develop the follow up implementation plans for the recommendations.

II.1. Key finding related to Student Success

Students with learning disabilities (LD) are as able to succeed in post-secondary education as their non-disabled peers, provided that:

A) their academic and social experiences during the elementary and secondary school years appropriately address the individual needs of students with learning disabilities; and,

B) their transition to post-secondary education is appropriately facilitated; and/or

C) the necessary individualized supports, services, programs and/or accommodations are available to them during their post-secondary years and they choose to use them.

Supporting data

- *95% of responding (those who completed and returned questionnaires to the LOTF) students stated that the pilot project contributed significantly to their academic success*
- *53% of students have been receiving As and Bs in their courses and only 7% have marks below a C*
- *18% of students stated that they were doing very well, 26% doing well and 30% doing reasonably well in their studies while only 1% indicated that they were doing so poorly that they were thinking of dropping out of school*
- *87% of the students stated that they were passing all required courses for their program*
- *38% of the students who completed exit questionnaires were graduating; 26% had completed their current course but were not yet leaving the institution; 21% planned to stay on and continue their studies in spite of pilot closure; only 5% of exiting students stated that they were actually dropping out of post-secondary education. (This figure is much lower than the drop out rate reported for the post-secondary student population in general and for students with learning disabilities in particular.)*

- *97% of students stated that they would participate in such a program again.*

Therefore, LOTF recommends that:

1. **The results of the work of the LOTF and the pilot institutions be distributed to all secondary schools and post-secondary education institutions throughout Ontario.**

This information package should include the LOTF's key findings and recommendations; the Government's response to these; data demonstrating that students with learning disabilities are as able to succeed in post-secondary education as their non-disabled peers; and identification of successful programs, project components and available resources. LOTF's research results indicate the need for systemic change throughout the education system, including but not limited to full implementation of and compliance with relevant legislation such as the ***Ontario Human Rights Code***, the ***Education Act*** and its regulations and the ***Ontarians with Disabilities Act*** (ODA).

2. **School boards consistently be held accountable for compliance with Regulation 181/98 under the *Education Act*, which mandates the development of transition programming and planning for all students with disabilities who are 14 years of age or older.**

Almost none of the pilot students had the benefit of mandated transition planning. Transition plans developed for students with specific learning disabilities must be in accordance with the Ministry of Education's Individual Education Plan Standards document. Schools and school boards must ensure that these students are made aware of the option of proceeding to post-secondary education and are actively helped to pursue such goals.

3. **Proven transition programming should be available to all students with learning disabilities who are going on to post-secondary education and are interested in participating in such opportunities.**

Participants consistently lauded the program offerings of Project ADVANCE, the summer orientation institute offered at York University. These students came from all parts of the Province and proceeded to a wide range of universities and colleges for their post-secondary studies. Many of them commented favourably over the past four years on the ongoing value and academic benefit of Project ADVANCE. Many also expressed the wish that such transition programming had been available to them earlier during the last years of their secondary school experience. In response, LOTF is funding seven additional pilot summer programs for 2003. Evaluation of these initiatives will provide future direction for achieving the recommendation's objective.

4. **All post-secondary educational institutions introduce and implement a full range of LD-specific service and program options appropriate to the needs and identified disabilities of each individual student.**

It is imperative that these programs and services be delivered at all institutions by knowledgeable, caring and supported disability services staff with expertise in learning disabilities. Students should be involved in the development and evaluation of these services, so that the provisions appropriately reflect student voice and experience, as was the case for the LOTF pilots.

5. **Incentives be made available to all post-secondary educational institutions to promote collaboration with secondary schools and other public sector organizations and agencies within their communities to offer intensive outreach and post-secondary orientation to adolescents and adults with identified or suspected learning disabilities.**

Extension to community-based organizations and adults who are no longer in school is particularly important for individuals with learning disabilities who have been barred from college or university entry because of lack of adequate educational supports and transition planning in the past. In many cases, adults have not had access to assessments. As a result, it is often suspected but not yet confirmed that their difficulties are due to specific learning disabilities.

II.2. Key finding related to Access to Diagnostic Assessments

A significant majority of the students arrived at the pilot institutions with no, or at best inadequate, diagnostic information. As a result, students had neither appropriate documentation nor an understanding of their own learning disabilities. A comprehensive, up-to-date diagnostic assessment is essential for the provision of requisite supports, services, programs and accommodations for students with learning disabilities. Almost all (85%) of the pilot students required professional (re-)assessment to enable them to succeed in their post-secondary education. The total process of (re-)assessment encompassed an explanation of individuals' specific learning disabilities, identification of strengths and difficulties, current functional skills, learning styles, potential coping strategies and compensatory skills, and accommodations needed to overcome the negative impacts of their disabilities and to reach their potential.

Supporting data

- *pilot institutions reported that 80 to 85% of pilot students came to post-secondary education with no or inadequate assessment and documentation of their learning disabilities*
- *pilot institutions reported that they had carried out 1395 full and 362 partial assessments in order to determine student eligibility for the pilot and to identify the students' learning and accommodation needs*
- *99% of students reported that they participated in a psycho-educational assessment of their learning disabilities as a program component*
- *87% of pilot students identified that their understanding of their learning disabilities had improved during the pilot period, primarily due to the (re-)assessments and the comprehensive explanation of the diagnostic assessment results by pilot staff*

- *only 2% of the pilot students were assessed for learning disabilities before entering school*
- *24% of pilot students left secondary school without any diagnosis of learning disabilities*

Therefore, LOTF recommends that:

6. **The Province of Ontario endorse a consistent definition and a comprehensive diagnostic assessment protocol for learning disabilities to be used in all publicly funded programs such as education, social service, health and other service areas.**

The definition should be up-to-date and based on current research. LOTF strongly urges the adoption of the definition developed by the Learning Disabilities Association of Ontario (LDAO) and supported by the Ministry of Training, Colleges and Universities (MTCU) for use by the Enhanced Services Funding (ESF) projects. The components of such a diagnostic assessment process must include the use of specific standardized measures, operationally defined methods of establishing the presence of a specific LD, a written report, an opportunity for feedback to the individual who has been assessed as well as recommendations for services, supports and accommodations focussed on enabling the individual to overcome the barriers resulting from having a learning disability. The assessment process must be carried out in accordance with the ***Regulated Health Professions Act***, 1993 and the guidelines recommended by the Ontario Psychological Association (1998) for the diagnosis of learning disabilities. As with the diagnosis of any other medically related disability, the diagnosis itself is a controlled act and should therefore be closely regulated. For this reason, it would be useful and appropriate if the Ontario College of Psychologists, the Provincial regulatory body for the profession, were to develop and endorse standards for the proper assessment and documentation of learning disabilities.

7. **The Identification, Placement and Review Committee (IPRC) process for the identification of a learning disability, in accordance with Regulation 181/98, should always and consistently be based on an appropriate and comprehensive diagnostic assessment.**

This will correct the too frequent occurrence of non-diagnosis and even mis-diagnosis of learning disabilities in elementary and secondary school populations in Ontario. Following an initial accurate diagnosis, there is no need for further regular psycho-educational testing. Learning disabilities are neurologically based and are a life-long condition. However, at major transition periods, such as elementary to secondary and secondary to post-secondary education or work, the validity of the existing recommendations for programming and accommodations must be reviewed. At these transition points, the student may need to have some additional educational or information processing testing to establish current functional levels and accommodation requirements.

8. **The Province adopt and endorse an early screening and intervention program designed to identify and assist all children at risk for school failure.**

Very often young children are identified as being at risk for school failure, but do not receive any help or intervention until they are at least two years behind their peers. Early intervention will enable some of these children to catch up to grade level without necessarily requiring subsequent special education supports. Others who do not make the requisite gains as a result of such early intervention should be referred for a diagnostic assessment to determine whether their difficulties are due to a diagnosable disability. The "Promoting Early Intervention" project delivered under the auspices of the LDAO, as well as some of the other early intervention projects resulting from the Mustard-McCain reports, are examples of such beneficial early programming.

9. **The primary diagnosis of a learning disability should be publicly funded through Ontario Health Insurance Plan (OHIP) or some other public or universally accessible funding mechanism, as is the case for all other disabilities.**

Diagnosis is the gateway to identifying appropriate services, supports, accommodations and achieving future success and independence for persons with learning disabilities. Restricting diagnosis to those who are able to pay for it themselves is discriminatory and results in inequity for most people with learning disabilities.

10. **The Province should establish, implement and evaluate the concept of Regional Assessment and Resource Centres.**

Such Regional Assessment and Resource Centres should have a mandate that includes the primary diagnosis of learning disabilities; the provision of access to and training in the use of assistive and adaptive technology, and other accommodation and resource supports to adolescents and adults who need such services.

Until such time as these are fully functional and providing services throughout the Province, the newly established **LOTF Mobile Assessment Team** should continue to provide assessment supports to post-secondary students in the un-serviced and under-serviced areas of the Province.

The Regional Centres could be modelled on similar centres established and widely used in the United Kingdom and Sweden.

II.3. Key finding related to Learning Strategy and Assistive Technology Supports

Pilot students consistently identified that, in addition to an improved understanding of their learning disabilities, they most valued:

A) provision of learning strategy supports by appropriately qualified and engaged staff, and

B) access to and instruction in assistive technology, from staff with expertise in both the technology and learning disabilities.

This was the basis of LOTF's preliminary recommendations to the Ministry of Training, Colleges and Universities leading to the establishment, for September 2002, of Enhanced Services Funding (ESF) projects at all Ontario colleges and universities.

Supporting data

- *pilot institutions reported that 1120 pilot students utilized assistive technology and 1086 pilot students utilized learning strategy and metacognitive training during the pilot period*
- *pilot students cited assistive technology and learning and metacognitive strategies as the most useful program components provided to them by the pilot projects*
- *86% of pilot students indicated that they had used and/or plan to use assistive technology*
- *94% of pilot students indicated that they had used and/or plan to use learning strategy and metacognitive training supports*

Therefore, LOTF recommends that:

11. **The newly established ESF projects be monitored and evaluated. Success in achieving their goals, should ensure that these services be maintained, enabling post-secondary education institutions to continue to provide enhanced programs, services and supports to students with specific LD who need these and commit to their utilization.**

The ESF projects have been approved for a two year period based on the initial findings of the LOTF pilot project evaluations. The impact of these projects should be assessed. Evaluation could include a review of the quality of services, rate of utilization by students, ratio of staff to students, institutional commitment to supporting staff and the ESF projects and to compliance with LOTF's conditions for ongoing funding.

The experience of the pilot projects indicates that student responsibility for participation in and evaluation of program components was a key requirement for success and meaningful accountability.

II.4. Key finding related to Institutional Responsibility

A) Pilot students consistently reported that lack of or limited faculty awareness and understanding of learning disabilities, and faculty attitudes toward requested accommodations presented the greatest external barrier to students' post-secondary educational success.

B) Students, staff, programs and services thrived at institutions where there was demonstrable awareness and support from senior administration.

Supporting data

- *32% of pilot students identified that in spite of their participation in the pilot project, there were barriers to their academic success at the pilot institution*
- *64% of these students identified faculty awareness and attitudes and related systemic issues as the primary barrier*

- *56% of responding students stated that faculty professional development about learning disabilities would be the most effective way to eliminate the perceived barrier*
- *concerns about the reluctance of some faculty to comply with all accommodation requests were raised at all student focus groups at all pilot institutions*
- *seven of the ten pilot institutions are engaged in exploring ways in which the principles of Universal Instructional Design (UID) may be most effectively implemented*

Therefore, LOTF recommends that:

12. **Incentives be provided to support innovative practices for faculty orientation and training at all colleges and universities. The goal is to ensure that all faculty and staff are made aware of and informed about the needs and entitlements of students with specific learning disabilities and the institutions' obligations to meet the accommodation needs of all such students.**

The pilot projects utilized diverse models for staff development. Although many students still expressed concerns about faculty attitudes, there were others who acknowledged individual faculty or occasionally whole departments as supportive and caring. The effectiveness of faculty training and orientation may be determined through student surveys and other evaluations.

13. **The Ministry of Citizenship amend the recently released guidelines for Accessibility Plans for colleges and universities under the ODA to include the following reporting and accountability requirements:**

- **applying a more inclusive definition of access beyond physical access,**
- **measurable goals,**
- **detailed implementation plans,**
- **realistic timelines,**
- **inclusion of appropriate learning disabilities provisions (beyond the current appended reference to the largest group of students with disabilities in the post-secondary education sector),**
- **the delivery of faculty and staff training and professional development,**
- **full compliance with the "undue hardship standard" for the accommodation of students with disabilities as expected under the *Ontario Human Rights Code*.**

The ***ODA*** is allegedly intended to support all individuals with disabilities. The current definition of access within the Act and the limited guidelines for accessibility plans imply that there is no real intent to make this Act meaningful and accountable for persons with learning disabilities.

14. **The principles of UID and its proven benefits for teaching and learning be disseminated throughout the education system.**

UID has dramatically altered the way in which many students and especially non-traditional learners, including but not limited to students with specific learning disabilities, can succeed in their studies. Senior administration and teaching faculty in the post-secondary sector and teachers in the secondary panel need information about UID and access to and training in assistive technology to introduce these principles. Incentives for wider UID application may require future exploration.

Many students with disabilities and in particular learning disabilities benefit from access to audio-taped textbooks, journal articles, etc. Taped materials are frequently not available in a timely fashion or are difficult to use. As one of its past advocacy initiatives, LOTF recommended to the Federal ***Task Force on Canadians with Print Disabilities***, that Canada should follow international examples where publishers are expected to release electronic versions of their materials at the same time as the print version. At the same time, LOTF also recommended to the Ontario Government that it endorse and take prompt action upon two of the recommendations that were included in the Federal Task Force's report, regardless of what follow up action we may see from the Federal Government. These recommendations were:

- That the Government establish and fund a clearinghouse for e-text to which all Canadian publishers must make their works available.

In Ontario, work had begun to establish an electronic virtual library, accessible to all universities. Using this initiative to house an e-text clearing house for Ontario would make very good sense and would be an efficient use of funds. Such a clearing house could be fully funded by participating publishers and software providers. However, this initiative is currently on hold. This is delaying access to electronic and taped materials for a large number of print disabled students (mostly students with learning disabilities) in the post-secondary sector.

- That publishing subsidies be available only to those publishers who provide and release e-texts simultaneously with their print texts. This should be further extrapolated to ensure that approved texts for elementary, secondary and post-secondary courses be ones published by publishers who comply with this requirement.

Neither of these recommendations has any significant direct cost to the taxpayer. At the same time, the benefits would be really significant for students with specific learning disabilities as well as others who are print-disabled..

II.5. Key finding related to Funding

A) A significant percentage of pilot students expressed ongoing concern about their inability to access the Bursary for Students with Disabilities (BSWD). The BSWD was established to help with disability-related costs in college and university and the listing of eligible expenses specifically mentions LD assessments. Many students cannot afford the costly assessments, assistive technology and other supports that compensate for and accommodate the effects of their learning disabilities, yet cannot access the BSWD, primarily due to ineligibility for the Ontario Student Assistance Program (OSAP). The continued linkage of the BSWD and OSAP is a significant post-secondary barrier to academic success.

B) Systemic adjustments to MTCU's Accessibility Fund are required because of adverse impact on staffing complements, assistive technology facilities and thereby student success.

Supporting data

- *throughout the four year piloting period, students reported that only 40% of them were eligible for and received funding from OSAP*
- *a slightly lower percentage of students (approximately 36%) received funding through the BSWD*
- *as a result the majority of pilot students had to rely on family support, if available, their own earnings or pilot institutional support to pay for disability-related costs, such as assessments, assistive technology and tutoring*
- *38% of pilot students held a paid job while studying, not an ideal situation because of the extra study load already carried by most students with learning disabilities*
- *concerns about money and lack of access to the BSWD were raised at every student focus group discussion at every institution throughout the four year piloting period*

Therefore, LOTF recommends that:

A) Re student funding

15. **The Province of Ontario separate eligibility for BSWD from OSAP so that all students with disabilities can access bursary funds equitably.**

The cost of the required assessment or re-assessment for determining BSWD eligibility should not be borne by the student. Nor should eligibility for the Bursary be based on the course load carried by the student. Failure to redress these inequities, including the linkage of the BSWD to OSAP, prohibits academic accomplishment for too many potentially successful students.

There are precedents for what we are proposing.

The Bursary Support for Deaf Students who are studying at out-of-country post-secondary educational institutions is independent of family income and is not fully taxable. The rationale for this is that no family should be penalized for having a deaf son or daughter and deaf students should not be disadvantaged due to the high cost of their education. LOTF believes that other students with disabilities should also be supported appropriately through enhanced access to the

BSWD. In particular, they should be able to have access to the Federally funded learning disabilities assessment grant.

It is important to note that the guidelines for the Canada Study Grants for Persons with Permanent Disabilities do not require that students be deemed eligible for provincial student loans or grants. Each province handles the administration of the Canada Study Grant for students with permanent disabilities in its own way and eligibility for this grant is not directly tied to provincial student loan eligibility. LOTF was pleased that, in response to LOTF's advocacy and earlier recommendations, the Government eased the OSAP eligibility guidelines to improve the access of students with disabilities to OSAP. However, this step is insufficient and Ontario needs to proceed further in this recommended direction.

The ***Ontario Student Loan Harmonization Act***, 2001, was introduced to permit the Minister to make direct loans to students of post-secondary education and enter into agreements regarding student loan arrangements. The Minister, when introducing this legislation, stated : *"Our commitment is that every willing and qualified Ontario student will continue to be able to attend college or university."*

The proposed step of decoupling OSAP eligibility from access to the BSWD would be a very important and beneficial arrangement under this Act.

B) Re systemic funding issues

16. **The Province of Ontario review and amend its current legislation and funding policies which result in discrimination against persons with learning disabilities.**

This issue was clearly identified in the *Report of the Interministerial Working Group on Learning Disabilities*, 1992. Such previously identified discriminatory practices continue in the Assistive Devices Program of the Ministry of Health, in the lack of public funding for diagnostic assessments of learning disabilities, in the lack of access to OSAP for adult students studying on a part time basis and for students involved in other types of programming such as apprenticeships.

17. **The Accessibility Fund allocation from MTCU should reflect the total full time equivalent enrolment of all students at the institution *and* the number of students with disabilities served by the institution.**

Many students with learning disabilities, when they have a choice, prefer to attend smaller post-secondary education institutions. As a result, on a percentage basis, many of the smaller institutions support proportionately larger numbers of students with LD than the larger ones. MTCU data demonstrate that there are significant variations among institutions' ratios of students with disabilities to their overall student enrolments. The funding formula needs to recognize this reality.

18. **Each post-secondary institution should receive adequate base funding, as part of the distribution of the Accessibility Fund allocation, to ensure that properly trained**

and qualified staff are available to provide assessments, intervention, training, coaching and support in learning strategies and assistive technologies to students with specific learning disabilities; and properly equipped and staffed computer lab facilities are available to students with specific learning disabilities.

The experience of the pilot institutions, which resulted in the establishment of the ESF projects at all colleges and universities, has demonstrated the importance of adequate funding for staffing and facilities. However, the ESF is limited to specified staffing costs and does not address the more comprehensive list of needs specified in the above recommendation.

II.6. Key finding related to Access to Post-secondary Education

The majority of pilot students reported that they:

A) had no access to useful supports in secondary school that would enable them to cope with, compensate for, accommodate or overcome the effects of learning disabilities;

B) had no access in secondary school to assistive technology or other accommodations that would enable them to succeed in their studies;

C) received no meaningful individualized transition planning support in secondary school, despite the requirements of Regulation 181/98; and

D) surpassed their own expected performance levels at college or university once appropriate accommodations and supports were made available.

Supporting data

- *24% of pilot students left secondary school without any diagnosis of learning disabilities and 12% of pilot students reported that they had no re-assessment done after elementary school*
- *35% of pilot students repeated at least one grade, despite clear evidence from research that such practices are destructive and preventable for students with learning disabilities*
- *28% of pilot students stated that they had received no special education help of any kind either in elementary or secondary school*
- *only 43% of the pilot students knew that they had been identified as having LD by an Identification Placement Review Committee*
- *46% of pilot students stated that they had been told that they were "slow learners"*
- *only 16% of the pilot students had access to an LD class placement in secondary school*
- *the most common special education help available to pilot students was doing exams differently from the rest of the students (reported by 57%) and access to a resource room, if they so requested (reported by 47%)*
- *only 8.5% of pilot students had access to assistive technology in secondary school*
- *only 10.7% of the pilot students received any kind of transition help or support to prepare them for post-secondary education*

- *students indicated that their understanding of their LD, their ability to explain it and advocate for accommodations significantly improved during the pilot period:*
    - *at the time of intake 47% felt that their understanding of their LD was good or very good; this increased to 75% at the time of exit*
    - *their ability to explain their LD well or very well increased from 37% at the time of intake to 56% at the time of exit*
    - *their ability to advocate for accommodations well or very well increased from 43% at the time of intake to 63% at the time of exit*
- *95% of participating students stated that the pilot project contributed significantly to their academic success*
- *it is important to note that in each focus group at each institution throughout the four years of piloting, students regularly and consistently initiated discussion about the devastating academic and emotional impact of non-identification, school failure, "slow learner" labelling, absence of appropriate educational supports and accommodations and frequent misplacement in classes for those with behavioural and intellectual disabilities.*

Therefore, LOTF recommends that:

19. **The Ministry of Education enforce compliance with the *Education Act* and Regulation 181/98 so that students with specific learning disabilities are guaranteed access to appropriate special education programmes and services, diagnostic assessments, learning strategy training, assistive technology use and training, transition planning, a full range of special education placement options and all other entitlements that they have under the *Ontario Human Rights Code* and the *Education Act*. Where students are denied *any* of these entitlements, they must be guaranteed the right of appeal.**

20. **The Ministry of Education, the Faculties of Education and the College of Teachers must ensure that all teachers in the Province are taught about learning disabilities, including specific instruction in:**
    - **recognizing the needs and entitlements of students with learning disabilities;**
    - **recognizing the fact that students with learning disabilities can achieve the Provincial curriculum benchmarks and outcomes at the same level as their non-disabled peers, provided that they are taught in ways in which they best learn and are guaranteed access to requisite accommodations;**
    - **how to adapt and differentiate their teaching methods;**
    - **how to utilize the principles of UID;**
    - **how to offer appropriate accommodations to meet the needs of students.**
21. **The Provincial special education funding formula be amended so that all students with learning disabilities (most of whom are not and should not be Intensive Support Amount / ISA-eligible) receive appropriate special education programs and services in accordance with their identified strengths and needs.**

22. **To facilitate improved transition planning, the Ministry of Education must immediately release the long-awaited transition planning guide for school board implementation and include in it exceptionality-specific components.**

23. **To facilitate successful graduation from secondary school, when taking the Grade 10 literacy test, students must be guaranteed access to the requisite accommodations listed in their IEP. Where students are initially unsuccessful in the test, they must have access to diagnostic assessments to determine whether they have an unidentified learning disability, or to a review of existing special education provisions to determine whether they require some additional or differentiated teaching prior to and accommodations when re-taking the test.**

Recommendations nineteen to twenty-three, as well as some of the earlier ones, relate directly to the work of the Ministry of Education and the school boards. When LOTF was established, the Ministries of Education and Training, Colleges and Universities were a single Ministry within the Government of Ontario. Although they are now two separate ministries with differing mandates, LOTF has kept both ministries informed about its work and provided its reports to both Ministers and staffs. Therefore, none of these recommendations will come as a surprise to the Ministry of Education. LOTF and the successor agency look forward to working with the Ministry of Education to bring these specific recommendations to fruition for the benefit of students with specific learning disabilities.

II.7. Key finding related to the Role of the Learning Opportunities Task Force

The LOTF model for applied research, with incentives for establishing pilot projects, accompanied by rigorous evaluation, meaningful accountability measures, and a major focus on valuing active student involvement, has proven successful for initiating significant systemic change within the post-secondary education sector. Similar changes are needed throughout the entire education system. Such change will build upon the successful results of LOTF's work, with and in support of individuals with learning disabilities, their families, and our communities.

Given that the Government of Ontario has already determined that the LOTF be succeeded by a permanent entity, LOTF recommends that:

24. **The LOTF successor agency be an independent, accountable, "arms' length" crown agency, with the following mandate:**
- **the development of detailed implementation and evaluation plans for all LOTF recommendations that are approved by the Government of Ontario,**
- **the tracking and evaluation of ongoing research and innovative projects and services related to the implementation of the work of LOTF and the pilots,**
- **establishment of applied research activities related to meeting the employment and other life-long needs of persons with specific learning disabilities,**
- **exploration related to meeting the needs of individuals who, in addition to having learning disabilities, also face other equity barriers,**

- **collaboration with appropriate organizations in Ontario, such as the ODA Directorate, the Human Rights Commission, LDAO, etc. and related Government ministries,**
- **distribution of information and resources to support professional development and training activities related to learning disabilities, and**
- **a regular five-year review of the relevance and validity of the work of the agency and the education and equity status of persons with learning disabilities in Ontario.**

The LOTF is convinced that implementation of the twenty-four recommendations will lead to the anticipated and desired outcome that students with specific learning disabilities are enabled to make the transition to post-secondary education, should they wish to do so, and receive the supports, services and accommodations throughout their post-secondary education enabling them to realize their full potential. In particular, implementation of recommendation #24 will ensure that there will be an ongoing process to develop implementation plans for all the recommendations as well as other continuing activities related to enhancing the educational and equity status of persons with learning disabilities in Ontario.

III. The LOTF Legacy

> ***"I am happy, and feel privileged to have participated in the Pilot Project. Since I was little, (and attending school), all I was ever told is what I cannot do, but through this project I feel like I can do anything I put my mind to. Thank you so very much, for giving me the opportunity to give something of myself back to society and the world."***
>
> **Pilot student quote**

III.1. LOTF's legacies: innovative and continuing activities

In the third year of pilot activity, 2000/01, all pilot institutions and their staff were invited to participate in a legacy building exercise. There was full collective support for the fact that the LOTF project needed to have a long term legacy at each pilot institution as well as systemically.

We defined legacy as "something resulting from and/or left behind by an action, event or person". We agreed that the legacies of the LOTF and the pilots should be positive, valued and noteworthy. The legacies should primarily benefit students with learning disabilities. However, in addition, the other beneficiaries of this work must be the entire post-secondary education system, the pilot institutions and other colleges and universities, the elementary and secondary school system and Ontario society as a whole.

Following some in-depth debate, the pilot institutions were invited to identify what legacies they wanted to have in place for their students for the post-piloting period and what were the requirements to develop, deliver and maintain these legacies. The LOTF was pleased that while financial resources were considered important, it was not suggested that money was the sole criterion for maintaining such legacies.

At a subsequent legacy planning meeting, all but one of the pilot institutions' presidents participated in a discussion of the value of the LOTF's work and the importance of legacy planning. Such participation demonstrating significant level of interest and commitment were gratifying, but more importantly helped to pave the way for further institutional and systemic change.

Now that the piloting phase of LOTF's work is finished at all but one of the pilot institutions, it is important to note that there are notable legacies in place. While the specific legacies at pilot institutions vary, there are some consistent components that are continuing.

The establishment of the Enhanced Services Funding projects (for a description, see III.2.) assisted with some of the practical legacy plans of the pilot institutions, especially for small institutions, receiving limited amounts from the Provincial Accessibility Fund. Nevertheless, all pilot institutions have committed to and are maintaining certain institutional and applied legacies, such as the use of the LOTF mandated definition of learning disabilities and adherence to the recommended assessment protocol. The latter is not as rigorous as the validation criteria for pilot students, but still results in an effective identification and assessment process.

Computer labs constructed with LOTF financial support are being maintained for students with learning disabilities. Pilot institutions are continuing to utilize and promote faculty professional development resources and opportunities. Some of the pilot institutions were able to identify additional internal or external financial and/or human resources to enable them to maintain most if not all of the pilot project components. None of the pilot institutions has returned to its pre-pilot level of services or supports for students with learning disabilities, although it is early to gauge longer term legacy commitments.

At the same time, many other non-pilot institutions are utilizing the results of the piloting work to significant benefit. They are finding that building upon the pilots' successes is enhancing their capacities to serve students with learning disabilities. There is greater awareness of the importance of the work of the Special Needs Offices, of the fact that students with learning disabilities are able to succeed in post-secondary education and of what these students require in terms of services, supports, accommodations and teaching methodologies.

In addition to the expected legacies at the pilot institutions, LOTF and some of the institutions have embarked on a series of innovative and continuing research activities, related to supporting students with learning disabilities in a variety of ways. These are described briefly below. For further information about any one of these projects, readers may consult the Technical Report or the LOTF office or the individual institution(s) involved in the project.

III.2. Enhanced Services Funding projects (ESF)

Based on consistent, cumulative responses from pilot students across the LOTF projects, it was evident even before pilot completion that participating post-secondary students with learning disabilities placed highest value on two types of supports: learning strategies (LS) instruction and supports, and assistive technology (AT) use and instruction. These results, derived from the student questionnaires in LOTF's data base, were consistent over the first three years, and indeed remained so for the fourth pilot year.

In communicating the availability of funding for the establishment of the ESF projects at all colleges and universities, the LOTF described these two positions and the related program components as follows:

Learning Strategists (LS)

The value of **learning strategy** instruction and coaching has been well established within the LOTF pilot projects. The role of learning strategist is pivotal in helping students to understand their learning disabilities, to assess their capacity to use learning strategies and to apply such strategies to better actualize their academic abilities. A learning strategist who works with students with specific learning disabilities should be able to demonstrate skills and knowledge in the following areas:

- **Knowledge** and **understanding** of learning disabilities and their impact on how students can learn to function effectively and efficiently in the post-secondary educational sector.
- The ability to **interpret** and **explain** LD assessments to the students.
- **Communication** with students and with a variety of internal contacts including other student services staff and faculty members.
- **Coaching** and giving feedback: being able to influence students to consider, learn, apply and evaluate learning strategies.
- **Innovative** thinking: developing specific variations on broad strategies to respond to unique student strengths and needs and varying classroom demands.
- **Problem-solving**: being able to respond flexibly to difficulties that students encounter in applying learning strategies.
- The skills of **LD specific counseling** to deal with students' reactions to negative learning experiences, feelings such as helplessness, defensiveness, anxiety, low self-esteem and an initial lack of self advocacy skills.
- The ability to focus on **results**: keeping the outcome in mind, i.e., increased efficiency in learning for students with learning disabilities.
- Personal **sensitivity:** recognizing student strengths and limitations and responding to those with empathy and adaptability.

Assistive technologist (AT)

The increasing availability and successful use of **assistive technology** suitable to individuals studying in the post-secondary sector makes this one of the more productive and requested academic accommodations for those with LD. LOTF's research has shown that the benefit of such services without the support of a knowledgeable technologist is minimal.

Such a professional will be able to demonstrate the following skills and knowledge:

- **Technical expertise** with a variety of software and hardware, competence to demonstrate these to students with LD in user-friendly ways and a commitment to maintaining that expertise as the technology changes.
- A **network** of contacts within the vendor industry, in order to remain current with trends in the assistive technology field, including new computer applications and new ways to apply assistive technology in educational settings.
- **Communication:** the ability to convey directions, concepts and applications to students, colleagues and faculty members.
- **Problem-solving:** being able to adapt to individual student strengths, limitations and aptitude in using assistive technology.
- **Adaptability**: being able to respond to differing demands in the academic setting and integrating the technology into and with the material taught.
- **Coaching** and giving feedback: being able to influence and encourage students in learning to use assistive technology with success and to give constructive feedback in the learning process.

- **Information seeking**: constantly seeking alternatives for students.
- A thorough **understanding** of learning disabilities and the way in which technology can assist students with LD.

Because the pilot institutions were each funded to provided individualized LS and AT supports, unlike most other colleges and universities, LOTF determined that a delay in acting upon such clear student evaluations would unnecessarily delay extending similar benefits to others. In consequence, LOTF forwarded recommendations in September, 2001, for enhanced funding with suggestions for implementation to the Honourable Diane Cunningham, Minister of Training, Colleges and Universities, requesting immediate consideration.

In February 2002, the Minister announced the establishment of the Province's Enhanced Services Fund (ESF) for post-secondary students with learning disabilities. Its purpose is to help eligible colleges and universities enhance and strengthen their abilities to meet the academic support needs of post-secondary students diagnosed with specific learning disabilities. The ESF is distinct from the Ministry's Accessibility Fund providing basic support to all post-secondary Offices for Students with Disabilities. Specifically, the ESF offers new opportunity for individualized provision of LS and AT instruction and supports to students with learning disabilities at any eligible Ontario college or university. Administration and evaluation of the ESF was assigned to LOTF.

Following the announcement, the LOTF Consulting Team developed a formal application process, distributed eligibility and application guidelines to all colleges and universities, and accepted an invitation to provide further information at a relevant provincial meeting hosted by the College Committee on Disability Issues (CCDI) and the Inter-University Disability Issues Association (IDIA), the two post-secondary special needs providers' professional organizations. Many additional queries were fielded by the LOTF Office.

LOTF was unsure of how many institutions would actually apply. While the process was not onerous, there were explicit requirements for concrete demonstration of senior administrative and institutional support - some with cost-bearing implications - as a condition for ESF approval. It was also determined that ESF could only cover the staffing elements of LS and AT provision, to the exclusion of any capital or "overhead" costs. LOTF was therefore delighted to receive applications from all of Ontario's public universities and colleges. After a consultation process to support proposal modifications, all were approved. The only exception to this is the pilot continuing into a fifth year, thereby delaying ESF eligibility.

For the remaining 18 universities and 24 colleges, individualized agreements developed by LOTF's Executive Co-ordinator, appending specific commitments for service delivery, participation in program evaluation, and agreed-upon institutional supports, are now signed. Recruitment and hiring for the new positions, supported by an innovative training initiative at Cambrian College (see below), are underway, with enhanced services commencing Fall 2002.

LOTF is providing some consulting services to the ESF institutions, and is co-ordinating institutional tracking and other monitoring procedures, to support Year 2 ESF renewals where warranted. The ESF projects will be evaluated after the first two years. Decisions about the future of these activities will be made after the evaluation of the projects and their benefits to students with learning disabilities.

The application guidelines and further information related to this process are included in the Technical Report.

III.3. Summer transition projects

One of the two key mandates of the Learning Opportunities Task Force was "to improve the transition of students with specific learning disabilities from secondary to post-secondary education."

Project ADVANCE was funded at York University during LOTF pilot years specifically to address and research the transition issue. The program offered an intensive six-week introduction to the challenges and expectations of Ontario's post-secondary education system. It was anticipated that students who participated in the York program would be enrolling at any college or university in Ontario. Approximately 20 students participated in each of Project ADVANCE's four summer sessions. The program has been carefully evaluated and has been proven to be successful, particularly from a student satisfaction and ongoing success perspective. Project ADVANCE graduates have been surveyed in subsequent years. As is reported in the executive summary of Project ADVANCE's summative report in Appendix C, all participating students have continued to pursue post-secondary education and most have been extremely successful in achieving their goals. They also consistently reported that their Project ADVANCE experience was critical to their successful transition to post-secondary education.

Consequently, LOTF is funding eight Summer Institute programs to be developed during the current academic year, which will be delivered and evaluated during the summer of 2003. While Project ADVANCE is the model, each institution has been given funding to plan a unique program according to their specific interpretation of the transition needs of students with specific learning disabilities. The eight post-secondary institutions have been assigned into partnerships as follows:

- York University and Georgian College
- University of Guelph and Conestoga College
- Carleton University and Algonquin College
- Queen's University and Loyalist College

There are several reasons for partnering institutions as outlined. The institutions are in close physical proximity and can easily and efficiently share professional expertise and facilities, and possibly program component delivery. By partnering a college with a university, LOTF is hopeful that the advantages and strengths of each system will result in a better program for students with learning disabilities. Finally, in expanding from one to eight institutions in a single year, there is concern that it may be difficult to attract the appropriate students with learning disabilities who would commit and most benefit from these programs. By partnering, institutions can consolidate two institutional programs into one, should it prove difficult to achieve targeted numbers.

Though there will be variation with regard to program delivery, generally the Summer Institutes will feature: some immersion in a residential setting; group work, team work and socializing, with an opportunity for discussion and, to decrease isolation, camaraderie with other students with learning disabilities; orientation to campus life and knowledge of post-secondary academic expectations; knowledge of one's learning disability and self advocacy; an exploration of learning styles, study skills and strategies; a focus on assistive technology with access to an assistive technology lab and the availability of qualified instruction. Summer Institutes will vary in length from two to six weeks. Students will be given an intensive program, positively focusing on educational issues relating to their learning disability, possibly for the first time in their lives.

III.4. Mobile Assessment Team (MAT)

During the course of the LOTF pilot projects, it became clear that there are a number of areas in Ontario where students in the post-secondary sector have limited or no access to psycho-educational assessments performed by qualified individuals. Given that the two most vital pieces of information required for academic accommodation are a proper diagnosis, along with a more detailed understanding of the areas of psychological information processing that continue to be impaired, it seemed necessary to ensure that adequate access to assessments be made available across Ontario. To remedy the current situation, the LOTF is piloting a Mobile Assessment Team (MAT).

Qualified Psychologists from across Ontario were recruited to be members of this team. They agreed to travel to under-serviced areas of Province, to perform comprehensive psycho-educational assessments consistent with the guidelines developed by LOTF regarding adequate assessment of a learning disability.

Eligible post-secondary institutions, i.e., those located in the under-serviced parts of Ontario, have been provided with a process for contacting the MAT and making the necessary referrals for assessment. Evaluation of the process and MAT's effectiveness is planned for the end of the academic year. If evidence indicates that MAT is a cost-effective, efficient and useful way of addressing the issue of limited access, then continuation of the project is expected.

III.5. Regional Assessment and Resource Centre: a pilot project

In order to provide academic accommodations and appropriate services to students with learning disabilities at the post-secondary level, they must have a received a recent and comprehensive psycho-educational assessment diagnosing a disability and recommending appropriate accommodations.

Research data collected from the LOTF pilot projects suggests that over 80% of students with learning disabilities come to the post-secondary level with inadequate or non-existent documentation of their learning disability. Furthermore, many who have been "identified" in the school system do not, in fact have a diagnosable disability, and therefore do not qualify for accommodations at the post-secondary level.

Private psycho-educational assessments are costly, and are not covered by either OHIP or most extended healthcare programs. Hence, many students with learning disabilities may not have the money to have their disability appropriately documented. This in turn limits their ability to benefit from post-secondary education, and realize their full potential.

The Learning Opportunities Task Force was established to improve the transition of students with specific learning disabilities from secondary to post-secondary education and to enhance the services and supports available to these students once they arrived at their post-secondary destination, so that they could complete their education successfully. While the Task Force has made great strides in meeting the second part of this mandate, improved transition, specifically access to appropriate and comprehensive assessments necessary for appropriate accommodation, is still lacking.

LOTF has, therefore, recommended the establishment of a pilot Regional Assessment and Resource Centres (RARC) to offer comprehensive psycho-educational assessments to students who either plan to apply to post-secondary or are presently in the post-secondary system, and for whom updated documentation of their disability is required.

This centre would provide comprehensive diagnostic assessments in the area of learning disabilities, and act as a resource for individuals who require learning strategies or adaptive technology assistance. It would also allow for systematic, multi-disciplinary research into the different types of learning disabilities, ways to best assess these conditions, and would evaluate various accommodation and intervention methods. Research into the neuro-behavioural aspects of learning disabilities, to assist with earlier identification and intervention, would also be priority.

A pilot project is planned for implementation at Queen's University to determine if such a regional centre would indeed meet community needs and provide cost-effective and efficient services. The MAT pilot (see III.4.) will be operated from the pilot regional centre, until future determinations of best service options are evaluated.

III. 6. Dyslexia Adult Screening Test (DAST)

At present, there are no commercially available, appropriately validated and psychometrically sound ***screening*** instruments to assist in identifying adults who may have specific learning disabilities. The diagnosis of learning disabilities currently relies on the administration of a battery of psychological and psycho-educational tests. Such tests must be administered by registered psychologists or psychological associates, take several hours of the client's time and cost an average of $1,200. As a result, there is significant reluctance both on the part of persons who may have specific learning disabilities and the secondary, post-secondary educational and other service delivery sectors to routinely participate in or offer such diagnostic assessments, unless there is some significant preliminary evidence that there may be learning disabilities present and that the diagnosis will lead to useful and beneficial interventions.

Recent research, carried out in the UK, suggests that a core group of psychological, physiological, and information processing impairments may consistently discriminate persons with dyslexia (a specific type of reading disability) from non-disabled adults. Using well constructed tests that measure these underlying processing skills, Angela Fawcett and Rod Nicolson developed an adult screening instrument (the Dyslexia Adult Screening Test or DAST) in 2001. This screening test is currently only available through the Psychological Corporation in the UK.

The same team had previously published a children's version of this screening test, which seems to have excellent discriminative ability, with high rates of accurate prediction as well as low false positive and false negative rates. This latter test is presently already available in North America.

The DAST takes approximately 30 minutes to administer, and assesses 11 core psychological processes (including cerebellar functioning). One current difficulty with this test is that it has not yet been widely normed on persons with well-documented dyslexia. In fact, the normative data currently available compares the performance of only 15 students who have dyslexia with 150 control students. Even with such small numbers, however, the DAST reportedly discriminated well between clearly dyslexic and clearly not dyslexic students, with a 94% "hit rate", and a 0% false positive rate.

The LOTF pilot projects represented one of largest groups of well documented, psychometrically identified adults with LD ever assembled. While many of the students had additional learning disabilities besides dyslexia, it was felt that it would be worthwhile to look at the efficacy of the DAST with this population. A research project was therefore conducted at six pilot sites to investigate the predictive value of the DAST, not only in accurately identifying those students known to have well documented learning disabilities, but also its ability to discriminate non-learning disabled students from those with such processing impairments.

The preliminary results obtained are encouraging. Analysis of the data collected from this study is currently underway. If successful as a screening tool for adults with learning disabilities, it is LOTF's intent to introduce this test to all post-secondary educational institutions as well as other organizations and institutions where the diagnosis of learning disabilities is an important task.

Further information about the materials used in this research project are included in the Technical Report or may be obtained from the LOTF office.

III.7. French Language Assessment Project (FLAP)

When the LOTF began its work in initiating pilot projects in the post-secondary sector, one of the proposals selected for implementation was one by a consortium of the three French-language community colleges of Ontario to establish pilot programs for French-speaking post-secondary students with learning disabilities.

In the proposal, the consortium identified many components required to achieve the goals of the project. Key among these was the need to ensure that the French-language institutions had appropriate assessment tools and processes to diagnose specific learning disabilities within the French-language student population. In its first year of operation, the project ran into some unexpected difficulties and obstacles. It found that there were few French-speaking psychologists in Ontario who were trained and proficient in the assessment of adult students with learning disabilities. Identifying these psychologists and persuading them to do the requisite assessments in the French-language colleges in addition to participating in the Province-wide identification and evaluation of appropriate assessment tools and processes proved to be a challenge.

In the pilot project's second year of operation the need for common French-language assessment instruments and processes to assess specific learning disabilities in Ontario's French-language post-secondary student population became increasingly obvious. At the same time, when LOTF undertook an external validation process to ensure that all pilot project students at all pilot institutions met the diagnostic eligibility criteria established by LOTF for a carefully specified definition of specific learning disabilities.

Meeting these established eligibility and diagnostic criteria proved problematic for the French-speaking institutions where more than 50% of the originally identified students did not meet the criteria established by LOTF. It became clear that the French-language psychologists were restricted by a lack of psychological and pedagogical assessment instruments normed for the Franco-Ontarian population.

The implications of this deficiency are significant for all French-language students with specific learning disabilities and for the French-language institutions which they attend. The lack of appropriate diagnostic instruments and processes to identify specific learning disabilities has delayed and unnecessarily complicated the assessment of students with specific learning disabilities. Further, it has made the development and delivery of proper, timely interventions difficult, if not impossible.

To correct this situation, the Learning Opportunities Task Force has embarked on the French Language Assessment Project, including considerable consultation with the Francophone community throughout Ontario. LOTF has entered into an agreement with the Psychological Corporation, the publishers of the Wechsler Tests, which are widely used in English for the diagnosis of diverse learning problems, including learning disabilities. The company has in the past translated and normed its tests to meet the needs of the Hispanic population in the USA.

Three tests, the Wechsler Intelligence Scales for Children and for Adults and the Wechsler Individual Aptitude Test, have now been translated into French. Currently, these translated tests are being piloted with the Franco-Ontarian population to ensure that the tests are linguistically and culturally appropriate and comprehensible as well as assuring that they measure the same skills and competencies in French as in English. Once the piloting phase is completed, the translated tests will be normed on a Franco-Ontarian population ranging in age from six to thirty years.

Once completed, the primary goal of this project will be achieved. This is "*to enhance equity for the Francophone population of Ontario, equivalent to that already available to the Anglophone population with specific learning disabilities*". The ability of the educational system to identify the presence of learning disabilities and develop appropriate interventions based on such identification will also benefit students in the elementary and secondary panels as well as post-secondary education. The anticipated project completion date is the summer of 2005.

III.8. Staff Training Initiative for Learning Strategists and Assistive Technologists

To support province-wide ESF implementation, Cambrian College's pilot initiated a staff training project. Its goal is to ensure a sufficient pool of Learning Strategists (LS) and Assistive Technologists (AT) with requisite expertise in providing these focussed services to post-secondary students with specific learning disabilities. The LS/AT Training Initiative, funded by LOTF and further supported by Cambrian, has three phases.

The first was a needs assessment. To begin, a province-wide survey of special needs/disability offices at post-secondary institutions was conducted. Issues such as interest in LS/AT staff training; the extent of gaps, if any, in expertise; skill development priorities, and course delivery preferences were explored. The 90% of respondents completing the survey, identified clear need. Their collective answers, supplemented by focus group participation, provided direction for course and certification development.

Given the high response rate and the need to provide almost immediate support to new ESF staff, LOTF approved the second phase of the Training Initiative. A coherent certificate program for each of two streams (LS and AT) was developed. The first three supported on-line (WebCT) courses were designed, and began in May 2002. Because of over-subscription, several sections for each were required. In Phase Two, 56 participants from 24 institutions completed a total of 103 courses. Only 7 colleges and 12 universities had no registrants at that time.

Detailed evaluation based on participant feedback showed consistent enthusiasm about course content. Only minor modifications were recommended, mainly to de-compress the time span for course completion. Responsive adjustments have been made to address this concern. Course facilitators observed that the high quality of student interchange is building a professional cohort of skilled LS and AT staff.

Due to the positive assessments, LOTF is now funding Phase Three, the design and delivery of the remaining ten courses. An advisory committee assembled at project's start to provide ongoing guidance continues. Due to unanticipated demands for repeated provision of the initial courses, additional cycles of course delivery are being managed at the same time. Students may select a certificate stream in AT, in LS, or dual certification. They may also opt to take individual courses without completing a certificate, which will ultimately require a mentored practicum.

LOTF's funding permits enrolment without tuition payment until the entire project is evaluated. If the totality of the program is successful, Cambrian will apply to MTCU for their formal approval of the LS and AT certificates as post-secondary offerings. Registrants would then pay tuition. The core of Cambrian facilitators would extend to include other qualified instructors as needed, employed through the College's Continuing Education Department. They would be supported by a full series of courseware materials that the Training Initiative is producing, to ensure standardization of content and skill acquisition.

A complete list of the courses for each stream, and Executive Summaries of Cambrian's reports on Phases One and Two, may be found in LOTF's Technical Report. Summative evaluation, including enrolment statistics and participant responses to Phase Three, is anticipated late in 2003.

III.9. Universal Instructional Design

A key component of achieving the LOTF's mandate to "enhance the services and supports that students with learning disabilities receive within the post-secondary educational sector, such that they can complete their education successfully" is that the student's specific strengths and deficits are identified through a psycho-educational assessment in order that the appropriate or specific supports and services can be put in place. The pilot institutions were uniformly successful in offering and shaping specific components to these students. The newly established ESF projects also build on this success.

However, the need to emphasize and enhance the specificity between student need and educational intervention continues as the primary focus for LOTF. The LOTF recognizes the potential to address student needs for accessing course and classroom information with the application of a universal approach to teaching. This is based on the application of the principles of Universal Instructional Design (see below) to the education of all students, with particular benefits to non-traditional learners, such as those who have learning disabilities.

The concept of Universal Design was first introduced in North America for architectural design. The idea was to build homes in response to 'life-span' needs, in a way that both young and old people and those with or without disabilities would find appealing and functional. The concept evolved into an education approach. Instructors came to realize that by posting their notes on web pages, by varying and offering more than one method of information dissemination, by complementing information dissemination with small group work, to list just a few examples, they could be more dynamic teachers, and be more inclusive of all students and their learning styles.

The principles of Universal Instructional Design are as follows:

1. **Determine the essential components of the course**: identify the knowledge and skills students must attain to successfully complete the course.

2. **Provide clear expectations and feedback**: be sure expectations and feedback convey the essential components of the course.

3. **Explore ways to incorporate natural supports for learning**: some disability-related accommodations benefit all students; explore ways to infuse these natural supports in all courses.
4. **Provide multimodal instructional methods**: students learn in a variety of ways, seek opportunities to use all learning styles.

5. **Provide a variety of ways for demonstrating knowledge**: create alternative ways for students to demonstrate knowledge and skills e.g., option of writing a paper or making a presentation.

6. **Use technology to enhance learning opportunities**: put materials on-line, arrange for course specific list-serves, select software that is compatible with screen readers.

7. **Encourage faculty-student contact**: invite students to use e-mail and available office hours to ask questions and solicit feedback.

Compiled from Chickering and Gamson's Seven Principles for Good Practice in Undergraduate Education.

Research into the application of these principles has demonstrated that, while they essentially model good pedagogical techniques, they are not as widely used in the post-secondary sector as they should be, but where introduced, most learners benefit. Most of the research into UID has taken place in the USA, with Australia and New Zealand close behind. LOTF has funded two UID projects, in order to introduce the principles into the educational system of Ontario and to refine their applications within the work of the pilot projects. Of particular interest, the project approaches of these two projects are fundamentally different, which will offer a valuable opportunity for evaluation and constructive comparison.

One project involves the direct partnership of two universities and two community colleges, all of which offered a pilot project to students with LD. These are Georgian and Canadore Colleges and Nipissing and Trent Universities. A fifth partner is Camp Borden, where participants take college level courses delivered by the Canadian army. This project primarily focusses on the individual faculty members modifying their course offerings and teaching approaches in accordance with the above seven principles. Each of the four participating institutions have committed to the dissemination of the principles of UID to the rest of their institutions at the end of the pilot project. Also, a manual is in preparation to cover the basis approaches to the introduction and implementation of UID principles. Once completed, this manual will be provided by the LOTF to all post-secondary institutions and will also be offered to secondary schools, where the principles of UID could also make a significant difference.

The second project is located in the Teaching Support Services at the University of Guelph. The focus in this project is on course enhancements, as well as full course redesign. In the first phase, the number of courses targeted for support was five large scale course re-designs and five to ten course enhancements.

In the second phase, Guelph has expanded the UID project to the newly formed University of Guelph-Humber. In this phase, four courses have been selected for large-scale course re-design. The planned expansion presents an exciting opportunity. The new institution has new curricula in which it will be easier to embed the principles of Universal Instructional Design. In this way, the effort and expense of applying UID principles parallels the effort and expense of building physical accessibility into a new building rather than retrofitting existing buildings.

Providing students with academic accommodations for test and exam situations has become common practice at post-secondary institutions, but providing access to information in the classroom has proven to be a greater challenge. At the beginning of LOTF's mandate faculty were surveyed and students were asked to comment on faculty attitudes towards accommodating their needs. Though there has been some enlightened progress among many faculty in recent years, students continue to cite negative faculty attitudes as the number one obstacle to their success in post-secondary education. Universal Instructional Design will not eliminate the need for specific accommodations, but there is no better example of an intervention that can positively engage faculty while contributing to a positive cultural shift towards their students with learning disabilities.

III.10. Thinking and Learning: an innovative transition project

During the last year of pilot activity at Trent University, a successful component available to both pilot and other students was the credit course entitled *"Thinking and Learning"*. Faculty and pilot staff who pioneered this course proposed a new initiative, approved by LOTF. The project will adopt the learning explorations of this university level course, as a six week secondary school credit course for students with learning disabilities. The intention is to create a complete course that could be either a locally developed course or be integrated into a senior level learning strategies credit course focussing on transition.

Once the course development is completed, it will be piloted at one or two Peterborough secondary schools. This will be followed with a summer training institute where teachers will be trained, as part of their Professional Learning Program requirement, to implement the new course at their schools. Trent will also pursue approval of the course through the Provincial Curriculum Clearing House as an approved secondary school credit course. Approval would result in its availability in all parts of the Province.

LOTF will, as with all other continuing initiatives, evaluate this project to assess its value and potential for wider application.

III.11. The issue of Intellectual Property

In 1998, the presidents of thirteen colleges and universities signed contracts with the Government of Ontario regarding the LOTF pilot projects. All agreements included the following standard clause on Intellectual Property [IP]:

"All materials including, but not limited to, documents, raw data, research, processes, technology, programs and inventions conceived or produced in the performance of the Agreement shall belong to the Ministry. The intellectual property (including copyrights, patents, trademarks, industrial designs, know-how and trade secrets) in them shall also belong to the Ministry. All of them shall be delivered to LOTF on completion or termination of the services and shall be forwarded to the Ministry by LOTF.

For purposes of the Copyright Act, the Recipient acknowledges that all materials produced by it in connection with this Agreement have been or shall be prepared by or under the direction and control of the Ministry through the LOTF and moral rights are assigned to the Ministry."

The Consulting Team developed a process to ensure that project managers and relevant staff understood that all forms of Intellectual Property materials originating from any LOTF pilot are owned by the Government of Ontario indefinitely and beyond the lifetime of each pilot project. Further, beginning in the summer of 2001, several host institutions and their pilots commenced additional exploratory projects funded by the LOTF. These too are governed by the same IP principles and procedures.

The intent of IP-related procedures was three-fold, to:
(1) foster adherence to relevant contractual obligations;
(2) ensure that materials purchased by public funding through the Government of Ontario would, following review, be made available to all public post-secondary institutions, beyond pilots who most immediately benefited from these funds (i.e., that such materials not be utilized for individual profit, but rather for the public good of present and future post-secondary students with learning disabilities); and,
(3) maintain a minimum standard of care and review of quality over claims that products, resources and similar materials originated in LOTF funding.

As expected, LOTF's pilot projects are generating an array of resources, products, "deliverables" and related materials that are legally owned by the Government of Ontario, through LOTF and the Ministry. A formal IP Registry was established by LOTF in July 2001, to assist with compliance. Its maintenance will be transferred to LOTF's successor agency once LOTF has completed its mandate. A number of the pilots' products are now registered and available for others to use, and in fact several have already been distributed for the benefit of all Ontario's colleges and universities. Other items' IP registrations are pending, either because the authors require more time to refine their products, or because innovations projects funded by LOTF are not yet complete. Specific listings are included in the LOTF Technical Report.

The projects were informed at various times throughout the piloting period about the IP Registry and process, as well as about copyright implications, and issues pertaining to acknowledgement.

They have also been informed that some materials (e.g. their final summative reports, certain informal outreach and other communications) are exempted from registration. However, while the pilots are free to share registry-exempted items, this does not imply LOTF approval of or agreement with the contents of non-registered items.

The complete guideline ***(LOTF IP Registry: Context, Procedures, Application, 23/07/01***) is included in the Technical Report.

IV. The next challenge: the future of LOTF and services for students with learning disabilities in Ontario

> ***"... This Pilot Project is one step/sign of what the government might be doing right for students that have an LD of any sort. It almost seems that things are coming out of the dark ages for students with LD and the Pilot Projects are proof that we, the students with LD, can and will be strong, independent, and decisive. We are just as intelligent as the next person which is important for people to realize. I ask you this, students that are in the public school and high school systems, where will they be if the services are not there? ..."***
>
> **Pilot student quote**

In 1997, Premier Eves presented a challenge to the education system of Ontario: create change such that students with learning disabilities receive real help to be successful and realize their potential in an equitable and meaningful way. He provided an incentive by establishing the Learning Opportunities Task Force with a budget of thirty million dollars over five years. LOTF, the pilot institutions and many dedicated and talented students collectively rose to the challenge that was presented to us.

Staff at the pilot projects provided outstanding supports, services and programming to the pilot students. The students, in turn, participated in and assisted with the evaluation tasks of the LOTF at an unprecedented rate. There is no doubt that the students felt well supported and expressed their appreciation of the opportunities available to them. They were also generous, lively and forthright in articulating their recommendations for institutional and systemic changes.

LOTF, in turn, greatly valued the formative and concluding recommendations provided by the students and pilot staff. We note that the direct perspectives of the pilot students were granted particular "privilege" as the key findings and recommendations were formulated. We also commend the extent to which the pilot projects and their staffs sustained primary focus on student voice and experience.

As we were approaching the end of the piloting period, there was a concern that, as has happened before with the reports of Task Forces, Royal Commissions and other initiatives, the results of the research, the findings and recommendations were presented, received and then tabled never to see the light of day again. We are hopeful that, given the size of our target population, the depth of enquiry undertaken and the comprehensive and far reaching nature of the findings, this is a most unlikely outcome for our work.

The positive reception accorded to our interim recommendations for the new ESF implementation by all post-secondary institutions this fall indicates that there is a systemic and political will not to let this work disappear. Similarly, the announcement that the LOTF (or more precisely its successor agency) will become an ongoing entity is again an assurance that services to persons with learning disabilities will continue rather than falling by the wayside due to a lack of commitment or interest on the part of decision makers and service deliverers.

Much has been written and said about the negative consequences of unidentified learning disabilities and individuals with this condition who have received no help or guidance or support. For individuals with learning disabilities whose disability is not identified and who have no access to appropriate services, research has identified and experience has confirmed the following potentially negative outcomes:

- dropping out of school,
- illiteracy,
- unemployment,
- reliance on welfare,
- mental health problems,
- suicide,
- drug addiction,
- teenage pregnancy,
- repeated incarceration.

Learning disabilities are not a predisposing condition for any of the above circumstances. These outcomes are not the direct result of having learning disabilities. Nor are they a co-morbid condition routinely accompanying learning disabilities. Rather, individuals with learning disabilities, due to the devastating impacts of continuous poor performance, wasted potential, under- and unemployment and damaged self-esteem, often find themselves in situations where there are limited or only destructive options apparently available to them.

At the same time, the LOTF research has clearly identified routes for students with learning disabilities to access and succeed in post-secondary education, which can substantially reduce harmful options. Individuals, who have an education, are much more likely to lead successful productive lives and become independent contributing citizens, rather than burdening society and themselves with the hallmarks of despair and failure.

As far as students with learning disabilities are concerned, good education is a "bargain" compared with the costs of ignoring such needs.

The Province of Ontario spends a great deal of money on education. Certainly, the funds available to the LOTF and the pilot institutions over the past five years have provided a generous incentive to get our work done. LOTF recognizes the need to be accountable for the expenditure of tax dollars and for ensuring that it results in positive outcomes and enhanced student performance. There is no doubt that the results of the past four years of LOTF piloting have proved the value of the funds spent, both to individual pilot students and to society as a whole.

LOTF is convinced that implementation of the twenty-four recommendations herein will lead to the anticipated and desired outcome that students with specific learning disabilities are enabled to make the transition to post-secondary education, should they wish to do so, and receive the supports, services and accommodations throughout their post-secondary education enabling them to realize their full potential to lead independent productive lives.

Now that we know what students with learning disabilities require to succeed and what is necessary to ensure that their goals are successfully attained at a reasonable cost, can we afford to do anything less?

That is the next challenge!

Key personnel involved in the work of the Learning Opportunities Task Force

Chairman of the Learning Opportunities Task Force:
Dr. Bette M. Stephenson

Consulting and Research Team members:
Eva Nichols, Consultant to the Chairman
Allyson Harrison
Larry McCloskey
Laura Weintraub

Administrative staff:
Bonnie Tiffin, Executive Co-ordinator
Joanna Jannetta, Administrative Assistant to the Co-ordinator

Members of the French Language Assessment Project:
Gerald Blake
Eva Nichols
Berenice Saracoglu
Bonnie Tiffin

Members of the Committee of Reference:
Dr. Bette M. Stephenson, Chairman
Mariette Carrier-Fraser, former Assistant Deputy Minister, Ministry of Education
Dr. Richard Cummings, Integra
Joan Green, former CEO, Education Quality Accountability Office
Catherine Henderson, Ministry of Training, Colleges and Universities
Clive Hodder, Provincial Schools Branch, Ministry of Education
Eva Nichols, Consultant to the Chairman, former Executive Director, LDAO
Dr. Wendy Roberts, Hospital for Sick Children
Karen Taylor, Canadian National Institute for the Blind
Douglas Waxman, former President, LDAO
Carol Yaworski, Executive Director, LDAO
Lynn Ziraldo, Minister's Advisory Council on Special Education

List of the ten pilot institutions active for four years of pilot activity (1998 to 2002) with their key contact staff member(s):

- Cambrian College, Sudbury: Susan Alcorn Mackay
- Conestoga College, Kitchener-Waterloo: Marian Mainland
- Fanshawe College, London: Frank Walsh
- Georgian College in Barrie, Orillia and Owen Sound: Kate Beatty and Jim Bryson
- University of Guelph: Bruno Mancini
- York University, Toronto: Cora Dusk and Marc Wilchesky

The English consortium pilot institutions:

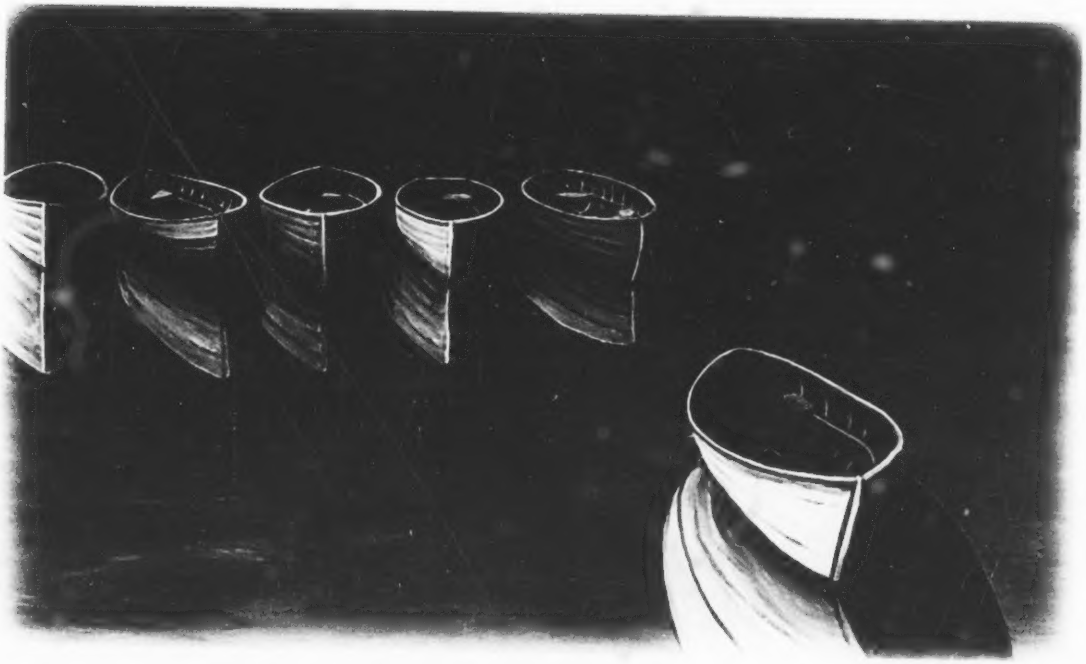
- Canadore College, North Bay: Dawson Pratt
- Loyalist College, Belleville: Catherine O'Rourke
- Nipissing University, North Bay: Dan Pletzer
- Trent University, Peterborough: Eunice Lund-Lucas

The Francophone consortium pilot institutions (1998 to 2000) and their contacts were:

- College Boreal, Sudbury: Chantal Pollock
- College des Grands Lacs: no longer exists as a separate institution
- La Cite Collegiale, Ottawa: Diane Chevalier

A full listing of all pilot staffs at all pilot institutions is included in the technical report.

It's about belonging



Learning Opportunities Task Force Report: 1997 to 2002

Appendix A

APPENDIX A

SUMMATIVE ANALYSIS OF THE CONSOLIDATED INFORMATION OBTAINED FROM LOTF STUDENT QUESTIONNAIRES BETWEEN SEPTEMBER 1998 TO SEPTEMBER 2002

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I. Introduction

Programme evaluation has been and continues to be a key part of the Learning Opportunities Task Force's work. It has consisted during the past five years of gathering and analyzing both qualitative and quantitative information, obtained from a number of diverse sources. The purpose of these programme evaluation and tracking activities has been to determine whether:

- the pilot institutions were providing effective programmes, services and supports to their students with specific learning disabilities, which were in accordance with the approved project proposals and which represented a demonstrable enhancement of the services, supports and accommodations that are already available to students with learning disabilities through the Ministry of Training, Colleges and Universities' Accessibility Allocation funding envelope and delivered to all students with disabilities through the institutions' special needs offices or offices for students with disabilities;
- the students reported noticeable improvements and individual successes over the life of the project; and
- the funds spent resulted in meaningful change and a consistent achievement of the student success indicators originally established through the work of the Consulting Team and accepted by the Task Force.

As the Learning Opportunities Task Force embarked on its activities, it was decided that the primary source of information, on the basis of which the pilots were to be evaluated and the final recommendations were to be formulated, would be the comments, experiences and opinions of participating pilot students. Obviously, LOTF also gathered significant data and qualitative information from the pilot institutions' staff. However, a formal decision was made to privilege student voice as the primary determinant of pilot success.

Students were invited to complete a series of questionnaires and share information, on a confidential basis, with the Task Force. While most students completed the questionnaires as written, some chose to include detailed comments, letters, statements or even fervent testimonials related to their past and ongoing experiences within the education system. If so requested, the consultants followed up by telephone or e-mail with students who wished to discuss their concerns or ask for information.

The students were also invited, on a regular basis, to meet with the primary consultant for their institution. Most of the students who accepted this invitation participated in focus groups with the consultants, with no pilot staff present. In addition, a smaller number of students chose to participate in individual discussions with the consultants.

The purpose of such extensive student involvement was to ensure that the students would feel that their participation was truly valued and that it was their experiences and opinions that most influenced the directions taken by the pilot institutions and the LOTF. As the LOTF arrived at its seven key findings and formulated its 24 specific recommendations, we consistently checked items against student data. As a result, LOTF can fully affirm that all key findings are supported by student data indicators.

II. An overview of student numbers and student questionnaires

II.1. Developing the student questionnaires

In order to gather information and data from pilot students, the Consulting Team initially developed three different types of student questionnaires. These are:

- the intake questionnaire, which was typically distributed to every pilot student within 2 to 4 weeks of becoming part of a pilot project. At some institutions the period of time was longer, since the institution only allocated an LOTF number to the student and provided a copy of the intake questionnaire after the student was deemed eligible for pilot participation;
- the progress questionnaire, which each pilot student was invited to complete and return once a year and no earlier than three months after completing the intake questionnaire. Some students who continued from year to year in a pilot project completed more than one progress questionnaire. However, the majority only completed one progress questionnaire;
- the exit questionnaire, which was provided to each student once he or she was preparing to leave the pilot project, though not necessarily either the pilot institution or their post-secondary studies.

The above questionnaires were supplemented by a summer exit questionnaire, which was used by the two summer orientation projects at Cambrian College and York University. This was seen as necessary because of the different nature of the summer programs. In September, 2000, the consultants also introduced a proxy exit form to be completed by pilot staff on behalf of students who left or discontinued participation in the pilot project without completing and returning an exit questionnaire.

The questionnaires were numbered to reflect the year in which the students received them. Intake questionnaires are numbered 11, 21, 31 and 41, with 51 being the questionnaire number for the University of Guelph's last year of pilot activity. Progress questionnaires were 12, 22, 32, and 42 with 52 being the progress questionnaire for Guelph for 2002/03. Exit questionnaires were 13, 23, 33, 43 and 53 for Guelph. The exit proxies were numbered 34 and 44, with 54 being the exit proxy for Guelph.

The information gathered from these questionnaires has been supplemented and/or confirmed from time to time by anecdotal information provided by students during the focus group meetings, when the consultants visited the pilot institutions. The purpose of the different types of questionnaires was to obtain both quantitative and qualitative data and information about the pilot students, their opinions about their experiences as pilot students and their recommendations collectively.

The questionnaires do not carry identifying information. The students are only identified within the LOTF data base and on the student questionnaires by a six digit number, made up of the two digit institutional number and a four digit unique identifying number for each student. The information linking student numbers and names was kept at the institution in such a way as to guarantee confidentiality and to assure the students' privacy. Once distributed and completed, the student questionnaires were returned to the pilot institution in a sealed envelope. The sealed envelopes and questionnaires were forwarded to the consultants for review and coding. Once coded, the questionnaires were sent to the Task Force office for data entry. Data analysis followed, carried out under the direction of the Consulting Team by the consultant who developed the LOTF database.

II.2. Student numbers

During the second year of the LOTF pilot activities, the validation process for determining pilot student eligibility was introduced. The details of the process and the criteria for considering pilot students eligible for pilot participation are included in the main report and are not repeated here. However, it is important to note that the student questionnaires included in this report are primarily ones that were submitted by students deemed eligible through the validation process.

There are two exceptions to this criterion. Students who only participated in the pilot projects in the first year of pilot activity before the introduction of the validation process submitted first year questionnaires provided that they met the eligibility criteria for participation. If these students did not continue in the pilot project beyond the first year, their questionnaires were retained in the data base. If they continued into the second year, they were expected to participate in the validation process.

Secondly, students who participated in the two summer orientation projects at Cambrian College and York University were exempted from the validation process due to the short duration of these summer projects. These students only completed intake and exit questionnaires. Data obtained from them are reported separately from the main body of the student data.

Therefore, it is important to note that this report has been written on the basis of information and data gathered from eligible and exempted pilot students, who participated in the pilot projects between September 1998 and September, 2002. It is important to note also that data obtained from students who were deemed ineligible through the validation process have been retained and may be used, if appropriate, at a later stage for comparison or other analysis.

As of August 31, 2002, the LOTF student data base contained data obtained from students whose eligibility for pilot project participation was as follows:

• Students who participated in year 1 only	138
• Students who are deemed eligible	987
• Students who are deemed ineligible	302 (data not included in this report)
• Summer students exempt from validation	117
Student total:	**1,544**
Student total for inclusion in this report:	**1,242**

It is important to note that the size of this student cohort and the detailed in-depth data that we have gathered from them is exceptional as far as learning disabilities research is concerned. Most published studies are based on much smaller student numbers and much less detailed and rigorous information.

II.3. Types and numbers of student questionnaires

The total number of student questionnaires included in the LOTF database upon which the contents of this report have been formulated are as follows:

Type of questionnaire	Year 1	Year 2	Year 3	Year 4 (includes year 5 for York's summer program)	Total
Intake	285	263	266	155	969
Summer intake	(included in the above number)	26	31	40 (includes 2001 and 2002)	97
Progress	159	254	331	247	991
Exit	96	81	99	225	501
Summer exit	(included in the above number)	25	29	39 (2001 and 2002)	93
Exit proxy	-	24	129	273	426

This is a total of 3077 student questionnaires obtained from 1242 students, all of whom were deemed eligible by the validation process or who were validation exempt for narrowly defined reasons explained above.

Copies of the student questionnaires are included in the LOTF Technical Report.

II.4. Intake questionnaires

The student intake questionnaire consists of 50 questions. In spite of the length of the questionnaire and initial concerns about its length from pilot staff in some pilot institutions, the majority of the students who responded continue to answer the majority of questions.

Further, anecdotal feedback from students at the LOTF-led focus groups indicated that the students appreciated the opportunity to participate in the pilot projects and were pleased to share their comments and recommendations with the Task Force. This was most encouraging both to the Task Force and the pilot institutions. Credit must also go to the staff of the pilot institutions, who promoted the importance of these questionnaires and provided ongoing encouragement to their students to complete and return them.

The total number of intake questionnaires received and included in the database is 1066, 969 regular intake and 97 summer intake. That means that 86% of the participating students completed and returned intake questionnaires. The pilot institutions reported that on the basis of the intake questionnaires that they distributed and returned to the consultants, the return rate was 85%. The actual numbers do not match, since some of the questionnaires were returned by students who subsequently were deemed ineligible through the validation process.

II.5. Progress questionnaires

The progress questionnaire consists of 39 questions. In spite of the fact that this questionnaire requires a great deal more writing than was the case for the intake questionnaire, most questions were answered in full on most returned questionnaires. Whereas the intake questionnaire primarily allowed students to use check-marks or circle one or more responses, the progress questionnaire asked students to write their comments in the space provided or on additional pages. These responses were content-analysed on the basis of a series of key words/phrases. The content analysis procedures were annually checked for inter-rater reliability.

Since the summer students do not complete progress questionnaires, the total number of students who were eligible to complete progress questionnaires was 1125. Of this number, 426 students (38%) did not complete and return any progress questionnaires. Therefore, 62% of the participating student group completed at least one progress questionnaire.

The total number of progress questionnaires received, 991, is made up of the following numbers:
475 students submitted one progress questionnaire;
170 students submitted two progress questionnaires;
40 students submitted three progress questionnaires; and
14 students submitted progress questionnaires in each of the four years of pilot activity.

The pilot institutions indicated that of the progress questionnaires that they distributed, 82% were returned. This was calculated on the basis of the total numbers of questionnaires, rather than the number of students.

II.6. Exit questionnaires

The exit questionnaire consists of 36 questions. The majority of students who returned their exit questionnaires responded to most of the questions.

Inevitably, there were very much fewer exit questionnaires returned than was the case for intake and progress questionnaires. The total of regular exit questionnaires obtained was 501, which is a rather disappointing 45% return rate.

II.7. Exit proxy forms

The exit proxy form only consists of 6 questions. A total of 426 exit proxies were returned by the institutions. If we total the number of exit questionnaires and exit proxies, then we can account for a total of 82% of pilot students. This is a lower return rate than was reported by the institutions in their institutional tracking questionnaires in terms of the number of exit questionnaires distributed and the number returned, including both questionnaires and proxies. In some cases, this discrepancy related to the validation status of some students. In others, some questionnaires were deemed invalid due to the dates on which they were completed by the student.

II.8. Summer exit questionnaires

The summer exit questionnaire consists of 30 questions. The majority of students who returned their exit questionnaires responded to most of the questions. There were 93 summer exit questionnaires and 2 proxies received. Compared to the total number of intake questionnaires completed by these students, 97, this is an impressive percentage (98%).

The last group of students participating in the Cambrian summer program did not complete any questionnaires, since the program was revised to run for only one week.

III. Demographic data

Regular intake questionnaires were completed by 969 students. The following demographic data, gathered primarily from the intake questionnaires, are calculated using this base number. However, where students did not answer a question and left it blank, the percentage always reflects the number who actually responded to that question. From time to time the same questions was asked in the progress and/or exit questionnaires. Where available, such comparative data are included in this section of the report.

Secondary school leaving/graduation dates ranged from 1952 to 2001.

- 8% of the total body of responding students reported 2001 as their graduation year,
- 14.6% reported 2000
- 19.2% reported 1999
- 17.6% reported 1998
- 8.7% reported 1997
- 7.8% reported 1996

That means that 77% of the participating students left secondary school in 1996 or later.

Since the responses to question 39 indicated that

- 660 pilot students (69%) were born in 1976 or later,

it is clear that the majority of the pilot students were recent high school graduates, ranging in age from 19 to 26. Fewer than 9% of the participating students were 35 years of age or older.

Other relevant demographic data include the following:

- 87% of the pilot students were born in Ontario;
- 92% report that their first language is English;
- 4% of the students state that their first language is French;
- 5.3% of pilot students report that they are of Aboriginal background.

The following comments will elaborate upon the above data further.

Of the students who did not report Ontario as their **place of birth**, Quebec was the next birth place most frequently cited by just over 2% of the students. Only 3% of the total pilot student population was born outside Canada. This profile is clearly not representative of Ontario's total population.

In Ontario, approximately 80% of the population report that they speak English as their **first language**, 6% speak French and the remaining 14% report other languages as their first language.

In larger urban centres, including the greater Toronto area and Ottawa, these statistics change, with the percentage of the population reporting "other languages" as their first language outnumbering the total of the ones who report English or French as their first language.

As we look at the pilot institutions, the majority of the students who reported French as their first language were at the Francophone colleges. Once that pilot was discontinued, the percentage of French speaking pilot students substantially declined to below 1%.

The only pilot institution where students reported a significant percentage of "other language" first language usage was at Atkinson College at York University. 16% of these students who submitted intake questionnaires stated that their first language was neither English or French. This is not surprising since York University was the only pilot institution located in a major urban area..

2.4% of Ontario's population characterize themselves as **Aboriginal** in census data. The 5.3% reported by pilot students is more than twice the incidence rate for Ontario's population in general and especially for those who are of Aboriginal background **and** who are participating in post-secondary education.

Gender distribution among the pilot students was as follows:

- 46.5% of the pilot students who responded were women, and
- 53.5% are men.

The LOTF has commented in several previous reports on the very close match between the numbers of male and female pilot students and how different these statistics are from those reported by Ontario's school boards for their identified exceptional students with learning disabilities. At the same time, it is important to observe that many other studies focussing on students with learning disabilities in the post-secondary education sector have also reported that, whereas in elementary and secondary schools the numbers of identified boys with LD vastly outnumber the girls, this changes where the focus shifts primarily to academic achievement, i.e., college and university settings.

In school settings, the impetus for special education referral is very often inappropriate behaviour rather than academic difficulties. Since boys frequently act out more than girls and since social conditioning influences the behaviour of girls towards compliance, it is not very surprising that so many more boys than girls are identified with certain exceptionalities, including learning disabilities, behavioural problems and emotional disturbance.

Further, it is still socially more acceptable for girls to achieve relatively poorly in school, provided that they behave well and do not disturb classroom activities. Additional information about gender based differences reported by pilot students are included later in this report.

The range of **living arrangements** reported by pilot students in the intake questionnaire was quite diverse.

- 34% reported that they lived with their parent(s) at that time;
- 20% lived in residence; and
- 12% lived with friends.

The balance of the students (34%) reported that they lived with a spouse or partner, alone, with other family or "under other circumstances", which also included single mothers living with their children.

In the progress questionnaires, the equivalent percentages for students who typically were not in their first year of the pilot projects were as follows:

- 30% lived with their parent(s);
- 19% lived in residence;
- 13% lived with friends; and
- 11% reported that they lived alone.

The balance of the students (27%) reported the other options.

In the exit questionnaires, students reported the following living arrangements:

- 36% reported that they lived with their parent(s);
- 12% lived in residence;
- 14% lived with friends; and
- 12% reported that they lived alone.

The balance of the students (26%) again were fairly evenly distributed across the other living arrangement options.

Although the total numbers of students responding to these questions on the three types of questionnaires are different, the numbers are large enough to compare the percentages. The fact that the largest percentage live with their parents implies that at least one third of the pilot students attended college or university in their home communities. Students were not asked to explain why they were living under the particular circumstances that they reported. However, many students offered anecdotal information (complaints) during the focus groups that their financial circumstances, i.e., their ineligibility for OSAP, contributed to the fact that they could not live independently during their post-secondary education period.

IV. Student funding issues

IV.1. Access to OSAP and BSWD

The students reported a known OSAP eligibility rate of 41% in the intake questionnaire, with a further 29% indicating that they did not know whether they were eligible for OSAP or not. At the same time, on the intake questionnaires, 59% of the participating students reported that they had applied or planned to apply for OSAP. Forty-six percent of the students completing intake questionnaires also indicated that they have applied and/or planned to apply for the Bursary for Students with Disabilities.

In the progress questionnaires received, almost 40% of the responding students indicated that they had been receiving OSAP and 36% reported that they had been receiving the Bursary for Students with Disabilities. The latter number also included the bursaries that some of the pilot institutions have available for students with disabilities, who are not eligible for the BSWD. However, even with the total number considered, almost two out of three pilot students were not receiving the BSWD and were therefore not able to purchase all the resources and cover all the disability related costs that the bursary is supposed to cover.

Ineligibility for the BSWD did not unduly disadvantage most of the pilot students during the piloting years. They had access to assessments and many of the required resources through the pilot project. However, even with the pilot project in place, many students lacked access to home computers and other resources that benefit them in pursuing their studies. The majority of pilot students who were in receipt of bursary funds indicated that they spent these funds primarily on computers and/or other technical accommodation devices.

At the same time, many students who were not eligible for the BSWD flagged for the LOTF consultants the fact that they were indeed at a disadvantage by having to utilize all technology at school, rather than being able to work at home. This was particularly acute for students who are also parents.

In the exit questionnaires, only 39% of responding students stated that they had received OSAP funding for their studies. In responding to the accompanying question about the Bursary for Students with Disabilities, 45% of the responding students reported that they had received a bursary. This included students at Cambrian College who received the bursary that is available to students who are in upgrading programs, but which does not lead to the $7,000 BSWD, and students at Trent University who received the university's bursary for students with disabilities.

The majority of these students once again indicated that they spent their bursary funds primarily on computers and/or other technical accommodation devices.

Student funding and the problems created for students with disabilities by the current structure of OSAP and BSWD eligibility have been identified as a significant barrier for student success in the preliminary LOTF research and all the follow up reports submitted to the government.

Much has been written about the pressures on students with disabilities in post-secondary education and in particular about the extra time that they often have to spend to keep up their marks and satisfy academic demands. Our data, reported later in this report, showing the percentage of pilot students who carry a reduced course load, presumably because the full load is too much for them, support this contention.

In fact, the Consulting Team has clearly supported the availability of a reduced course load as an appropriate accommodation for some pilot students. However, students assume a higher expense and debt load, when agreeing to this arrangement.

Further, it is obvious from the information obtained from both our pilot students and the pilot institutions that the vast majority of students with learning disabilities need to be reassessed, at the start of their post-secondary studies. The 1992 *Report of the Ontario Interministerial Working Group* also confirmed that lack of access to assessments was one of the greatest barriers facing adults with learning disabilities in Ontario.

The primary diagnosis of most disabilities is covered by OHIP. Reassessments for physical, sensory and developmental disabilities are also fully covered. However, the diagnosis of learning disabilities is typically carried out by a psychologist. Since psychological services are not covered by OHIP and no other redress has been implemented, this particular form of systemic discrimination continues. When a post-secondary educational institution, an employer or a licensing body to whom such a student applies for accommodation to write a licensing test requires an up to date assessment, the person with the learning disability has to find the funds to pay for this. Similarly, they often have to cover the costs of the accommodation themselves. Those with learning disabilities are the only persons with identified disabilities in Ontario who are excluded from government help to pay for assistive devices. This represents a major barrier for this population that other persons with other disabilities do not have to face.

Students participating in our pilot projects have had access to much needed assessment services and accommodations including assistive devices. Those without access to bursaries to purchase their own equipment could usually use the pilots' well-equipped computer labs and other resources. Some of the pilot projects also assisted their students with acquiring computers and other assistive devices for home use. The value that pilot students placed on these opportunities, as demonstrated by their responses to the LOTF questionnaires, together with other objective data such as positive impacts on retention rates and GPAs, reinforces that systemic changes for all such students are an essential legacy of the important work that the pilots and the Task Force have been doing.

The majority of students with learning disabilities within Ontario's post-secondary education sector regrettably do not have access to enhanced opportunities for accessing assessments as the pilot students have done. Only a minority can access the BSWD to purchase crucial assessment services. As of September, 2002, many students with learning disabilities enrolled in Ontario's colleges and universities will have access to enhanced services, supports and accommodations, provided through the Enhanced Services Fund, administered by the LOTF. Other initiatives being piloted such as the Mobile Assessment Team will assist in ensuring that participating students who are not BSWD eligible can still be re-assessed, until the other recommended systemic changes related to funding and assessments are made. Despite the advances represented by the ESF and MAT, systemic funding inequities still impede academic and employment success of too many persons with learning disabilities.

IV. 2. Paid work while studying

In spite of the availability of significant supports related to their studies that were provided by the pilot institutions, assessments, tutoring, computer labs, etc., many students found it necessary to work during the pilot years in order to help support themselves, their families or at least contribute towards the costs of their studies and specific LD related costs.

Thirty-eight percent of participating students reported in the intake questionnaire that they had paid work while they were studying. The majority of these students (65%) reported that their working hours typically ranged from one to 16 hours per week, with the balance working even longer hours. In several previous reports the consultants have expressed a concern about the fact that such a large percentage of pilot students find it necessary to work to be able to participate in post-secondary education. While having to hold down a job while studying is a problem for most students, it is a particularly serious barrier for students who have learning disabilities and as a result are often at a disadvantage in meeting all their academic requirements in a timely fashion. The stress resulting from trying to meet these demands to compensate for the impacts of their disability are further intensified by the pressures of working.

In the progress questionnaire responses, 44% of responding pilot students indicated that they had a paid job while studying. The number of hours worked was still typically between 1 and 16 hours. However, 34% of the students who had a paid job during the academic year indicated that they worked at least 17 hours a week.

In the exit questionnaire, 47% of responding students indicated that they had a job. Of this number, again 34% reported that they worked 17 hours a week or more.

While the numbers of students included in the three sets of questionnaires are different one from another, the trend indicated here, i.e., that more than one in three pilot students hold a paid job while studying, is of significant concern to LOTF. While we had not asked students to indicate in these questionnaires why they were working, the anecdotal information provided at focus group meetings and the occasional letter sent with a questionnaire indicate that many pilot students face significant financial pressures, sometimes jeopardizing their abilities to stay in school. There was further corroboration of this on some exit and proxy exit questionnaires. Improved access to OSAP and in particular the BSWD would enable at least some of these students to concentrate more fully and productively on their studies and on their future career success.

V. The pilot students' studies at the pilot institutions

V.1. Programs and courses

The range of subjects studied by incoming pilot students during the four years was diverse. In the college system, pilot students identified almost every major program area among their studies.

University students who were 26% of the total pilot student population, excluding the summer orientation programs, were somewhat more limited in their selections.

- 30% reported that they were in Arts and Humanities;
- 17% in Social Sciences
- 14% in Business and Marketing
- 12% in General Arts and Sciences.

We noted that very few pilot students were studying mathematics or computer science and only 10% were enrolled in pure sciences. Five per cent of the students were enrolled in education at Nipissing and Trent, with a number of other students indicating that they intend to go on to study education. This presumably reflects the fact that three of the four universities involved with LOTF have Faculties of Education, rather than the fact that students with learning disabilities are more likely to seek out teaching as a future career.

The diversity of courses studied reinforces the fact that students with learning disabilities are not "cut out" for any particular course or career choice. Such decisions should always be based on the identified strengths and needs of the student. It is also important that students be helped to understand that it is acceptable to make future choices on the basis of what tasks they wish to avoid or what skills they are not going to be able to master, even with significant accommodations. Often students with learning disabilities are led to believe that they should keep practising and learning those things with which they have problems, often at the expense of their areas of strength. This is not an appropriate approach for any students within the post-secondary education sector. Just like their non-disabled peers, students with LD have to learn to make good choices and benefit from encouragement to exploit their strengths and interests.

The vast majority of students answering the intake and progress questionnaires were, not surprisingly, in their first or second semester or year of their studies. Of the respondents, upon graduation:

- 19% expected to receive a college certificate,
- 50% a college diploma and
- 26% a university degree.

This is a reflection of the relative numbers of college and university students among the pilot students. However, it is important to note that the percentage of students expecting to receive a certificate, i.e. take a one year course, is lower than was the case in the first year of pilot activity. This may be interpreted as a positive response to the supports that the students are receiving. In fact, a number of students indicated that after receiving their first certificate or diploma they would remain in school to upgrade their skills and knowledge. This seemed to them possible, when they could have the support of the pilot projects.

V.2. Work load and retention

Most students participating in the pilot projects were full time students.

- 93% of responding students reported in the intake questionnaires that they were full-time, and
- 89% in the progress questionnaires reported full-time status.

Given the different base line data for the number of students returning different types of questionnaires, the above difference should not be interpreted as particularly significant.

In the intake questionnaire

- 28% of responding students reported that they were taking a reduced course load.

Taking a reduced load has often been seen as beneficial to students with learning disabilities. It has been noted in the past that students sometimes switch to a reduced load after not doing particularly well in their first term examinations. This is certainly a preferable option to dropping out or changing courses, unless the original program choice does not match their areas of strength and/or interest.

The reported percentage for reduced course load increased to

- 37% in the progress questionnaire response, with
- 20% of the total number of responding students confirming that they changed their course load from the previous year.

A number of students indicated that, with the support of the pilot project, they were able to move from reduced load to full load. They reported that they felt that they were ready for more or for greater challenges. The majority who changed their course load stated that the difficulties that they faced in meeting the overall course requirements for all their subjects was the primary reason for the reported change. It was encouraging to see this level of flexibility on the part of the institutions and the willingness of students to use this accommodation when appropriate.

When questioned about the change in course or program selection,

- 14% of students reported in the progress questionnaire that they changed their course selection since completing their intake questionnaire.

Once again, course expectations and difficulty were the primary reasons cited. However, a number of students also stated that with the help and accommodations that they were receiving as pilot students, they were ready for a greater challenge in their course selection than permitted by their original choice.

Still on this topic,

- 78% of the students indicated in their progress questionnaires that their current course selection is the right one for them.

- Only 6% stated that they did not think so, while the balance (16%) said that they did not know.

When asked why they have not changed courses if they believed that their current course selection was not or may not be the right one for them, most of the respondents cited problems with timing, i.e., changes can only be made at certain times during the academic year. It must be noted that an almost equal number cited their own indecision about an alternative course selection.

Given the high rate at which students in general drop out of post-secondary education after their first set of examinations, it may be appropriate to conclude that the pilot projects have been instrumental in reducing the drop out rate for their students with learning disabilities. Several of the pilot institutions tracked the retention rate within their institutions for pilot students, for students with LD who were not pilot students and for the institution's general student population. Their observations confirmed that the retention rate for pilot students was higher than for the other two groups.

V.3. Academic achievement

In response to the questions in the progress questionnaire related to the students' current achievement level in their courses, of the responding students:

- 18% indicated that they were doing very well in their studies
- 26% indicated that they were doing well
- 30% indicated that they were doing reasonably well
- only 6% indicated that they were doing poorly or were actually failing.

The consultants were very pleased to note that fewer than 1% of the total student group stated over the four year period that they were thinking of dropping out or transferring to another institution, as a way of dealing with their actual or perceived academic difficulties.

As far as their specific reported marks are concerned

- 53% indicated that they are getting mostly As and Bs;
- only 2% of the responding students indicated that they were getting marks below C.
- 87% of responding students indicated that they were passing all their required courses;
- 82% indicated that they had not failed any courses in the year in which they completed the questionnaire;
- 82% indicated that they had not had to drop any courses to avoid having a failure recorded on their transcript.

These success indicator statistics have been tracked from year to year. Over the four years there has been a steady increase of the percentage of students who are getting good marks, clearly underlining the fact that the pilot students are generally doing well in their studies at the pilot institutions.

In their exit questionnaires, 38% of the responding students reported that they were leaving the pilot and/or the pilot institution because they were graduating. Twenty-six percent of students cited that they had completed their courses and 21% stated that the pilot's end was the exit reason. Only 5% gave dropping-out of school as their reason for leaving the pilot project, with another 5% indicating that they were transferring to another post-secondary education institution. The reported drop out rate at 5% is higher than the 1% who reported that they were thinking of dropping out because of academic difficulties. However, it is still much lower than the general non-completion rate for post-secondary education. Less than 1% of the pilot students stated that they had been unhappy with the pilot project. A small but notable minority reported financial concerns for their departure from post-secondary education.

VI. Valuing the pilots

The extent to which the students expressed their appreciation for and commitment to the pilot projects and staff was most encouraging to the pilot institutions and to LOTF.

In response to a question in the progress questionnaire about their success in their studies,

- 93% of students indicated that their participation in the pilot project was helping them to be more successful in their studies.

When asked to explain their responses, the students offered a wide range of answers. In most cases these were positive responses, although there were a few critical comments about specific pilot components. The most common response cited the various specific supports that they were receiving. In some cases the students referred to specific pilot components, such as counselling or the services of a Learning Strategist or LD specialist. In some cases they named pilot personnel. The rare criticism offered primarily referred to systemic and institutional matters, such as problems with certain faculty or academic departments or divisions.

In the equivalent response to a similar question in the exit questionnaire,

- 95% of students responded positively about the help that the pilot project gave to them.

Of these positive respondents,

- 72% stated that the pilot had helped them very much
- 23% responded that the pilot helped them somewhat and
- 5% indicated that they were helped "a bit".

When asked to describe what they found most helpful, exiting students mostly mentioned specific pilot components and frequently mentioned pilot staff by name. Many students cited the support of Learning Strategists and/or Assistive Technologists as their primary and most important source of help. It was these responses that led to the preliminary recommendations which resulted in the establishment of the ESF projects. Other specific attributions included references to non-technical accommodations such as having more time, the support of note-takers, etc., as well as having a new assessment and an explanation of their learning disabilities.

When asked to comment on what was not helpful, there were far fewer responses obtained from exiting students. These responses often related to items other than pilot project components. For example, some students cited money issues, faculty attitudes, and the distance of the pilot institution from their home.

The majority, however, indicated that they would not change anything about the pilot project. Those who responded otherwise to this question often cited institutional and faculty awareness or attitudinal issues as needing improvements.

Most students (96%) indicated that they would enter such a pilot again, if given the opportunity. Those who responded positively to this question primarily cited their opportunity to be re-assessed and specific pilot components as the reason for their positive attitude. Many students also suggested that such opportunities should have been available to them when they were in elementary and secondary school and should in fact be provided to all LD students throughout their education.

There were only two negative responses (out of a total of over 500 exit questionnaires received) to the question that asked pilot students whether they would recommend participation in such a pilot project to a friend or a relative who has a learning disability. While there were a number of students who did not answer this question, the level of positive affirmation from responding students (99.6%) is impressive. The pilot institutions can indeed be proud of this level of positive feedback from participating pilot students.

VII. Previous schooling and related special education experiences

VII.1. School experiences: length of schooling and levels of difficulty

Although the majority of students participating in post-secondary education are typically secondary school graduates, not all pilot students graduated from secondary school.

- 89% reported that they graduated from secondary school in Ontario.
- 14% reported that they did not receive a secondary school graduation or honour graduation diploma.

These percentages had been quite consistent from year to year. The chances are that some of these students entered post-secondary education as mature students, perhaps with a high school equivalency or with having taken a GED certificate course. In addition, the TCLD program at Cambrian College specifically targeted not only those who have severe or complex LDs, but who also who discontinued their formal studies before graduation and, as a result, would not have even considered post-secondary studies as a potential option. In addition, it is possible that some of the students who indicated that they had not received a diploma were first year students who had not actually physically received a diploma, since most high school graduations are in mid to late fall. This is particularly likely for students at Guelph and Nipissing who stated that they did not receive a diploma.

Regarding the level of difficulty of their high school credits,

- 51% of pilot students took the majority of their courses at the general level and
- 40% at the advanced level, when in secondary school.
- 7% reported that they took their courses mostly at the basic level.

In the reformed secondary school system in Ontario, as of September 1999, there are no basic level courses. The college-bound stream is significantly more academic in its focus than the former basic level. This reflects the level of academic achievement expected by community colleges. While there are locally developed courses available for students who face significant difficulties in secondary school, these courses typically do not lead to students being able to satisfy the new graduation requirements. For some students the locally developed English, math and science courses in Grade 9 serve as a transition process to enable them to move to the applied stream for the rest of their courses. Many others will continue to take locally developed non-credit courses, which will not lead to a secondary school graduation diploma and therefore will bar them from post-secondary education. Many students in the locally developed and applied streams will have difficulties with passing the grade 10 reading and writing test, particularly in the frequent absence of suitable accommodations.

We do not automatically assume that all students with learning disabilities who studied primarily at the basic level were not able to achieve any kind of academic success. In many school boards during the past few years a significant number of students with learning disabilities were streamed into basic level, as an alternative to receiving appropriate special education programs and services in secondary school. Our reports may help the Ministries and by extension the school boards to identify the difficulties faced by students with learning disabilities, especially when it comes to transition from locally developed courses to new applied or academic courses and satisfying the revised secondary graduation requirements. Certainly, the accumulating collective data and information from our pilots provides a wealth of relevant information to encourage more appropriate preparation for post-secondary access for students with learning disabilities.

Regarding the length of their secondary studies,

- 53% of students reported that they left at the grade 12 level and
- 39% reported that they left at the grade 13/OAC level.

The latter are typically the same students who took their courses at the advanced level. This information confirms that students who studied at the advanced level and completed their OAC year do not necessarily always go to university. This may be particularly true of students with learning disabilities. Many students in the college pilots have mentioned that they were strongly urged, even when studying at the advanced level and staying in school to grade 13, to consider community college rather than university as their post-secondary educational destination.

Of the students who reported that they completed Grade 13 and received OAC credits, 18% are currently enrolled in community college. While this may be the appropriate placement, in accordance with the students' goals and wishes, for some students entry into a university based degree course might have been more suitable. As linkages across colleges and universities become better developed and as the secondary school system comes to support students with learning disabilities more effectively, it might be expected that there will be more appropriate post-secondary access for all LD students, who wish to go on with their education.

When asked about the number of years that they spent in secondary school, most responding students reported either five years (49%) or four years (36%). The balance (15%) mostly spent *more than* five years in secondary school. We anticipate that this will change as the formal fifth year of secondary school education, grade 13, is phased out in Ontario.

VII.2. Grade retention

Regarding repeating a grade during their elementary or secondary schooling

- 35% of pilot students report that they had to repeat a grade at some stage of their elementary or secondary school career. This included both college and university pilot students, but at different rates. 41% of college students and 21% of pilot university students reported that they had repeated at least one grade.

It is remarkable to what extent this figure has been consistent over the past four years. Given the research information available about the questionable benefits of repeating a grade, especially if during the repeated year the student is essentially taught the same things in the same way and compared to the provision of appropriate special education programs and services, this statistic signals an ongoing problem in the education of students with learning disabilities in Ontario.

We know that the students who make it to post-secondary education are among the most resilient and successful among the total population of students with learning disabilities. Therefore, the chances are that the grade failure rate for the general population of students with learning disabilities within the school system is even higher than 35%. There is no doubt in our minds that the provision of appropriate special education programs and services, early identification and intervention, good diagnostic services and the development and implementation of a suitable IEP with the requisite accommodations would reduce the need for "grade retention" (i.e., failure) for many students with learning disabilities.

A recent report from the National Association of School Psychologists (2002) identified that Research does not support grade retention as an effective intervention. "Retention is ineffective, and may be harmful. Retention at any grade level is associated with later high school dropout" they report. They also cite that "a century of research has failed to demonstrate the benefits of grade retention over promotion for any group of students." Their data show that schools retain boys much more frequently than girls and that many students with learning disabilities are retained. For others, a year or more of retention is required, before the student may be deemed eligible for special education help.

Similarly, in spite of ample research to the contrary, many Ontario school boards require a two year or more academic delay, before a student can be considered for a learning disability assessment.

VII. 3. Favourite and difficult subjects

Turning to school subjects that pilot students liked best and the ones that they found the most difficult, there are some interesting contrasts. The range of favourite subjects has been quite diverse, with almost every subject mentioned. Many students only identified one subject under each heading, while others included more than one. Focussing on the first subject mentioned, any favourite subject listed by more than thirty students included Art, Computer Science, Drama, English, History, Math, Music, Physical Education and Technical Studies. Technical Studies proved to be the most popular subject, mentioned by 13% of the responding students.

Compared to subjects listed in previous annual reports, cumulatively, Drama and Music are mentioned less frequently in the fourth year reports. This may reflect the changes made in the secondary school curriculum over the last few years, as a result of which certain subjects, including Music and Drama, are now less frequently available than was the case in previous years.

When it comes to the most difficult subjects, the range is much smaller. English was cited as the most difficult subject by 37% of responding students and Math was so selected by 40% of the students. No other subject merited a ranking anywhere near to these two subjects.

English competency is a requirement for both college and university graduation, and basic Math competency is also often a college graduation requirement. Given the above statistics, it is not surprising that subject specific tutoring and remediation in English and Math are very much in demand throughout the post-secondary educational system. Such tutoring is often in limited supply and scope. It frequently does not meet the needs of students with learning disabilities. There is no doubt that this contributes to the high level of post-secondary drop out rate in general. Pilot interventions, specialized tutoring along with LS and AT provisions may explain the reduced drop out rate reported by the pilot institutions.

VII.4. Areas of strength reported by the students

When turning to the students' reported areas of strength, it is gratifying to note that only 9% did not answer this question or explicitly stated that they had no areas of strength. This four year consolidated rate is an even lower percentage than was reported annually in the previous years.

The remaining students reported their primary strength areas were as follows:
- academic or school-related skills: 34%
- social or interpersonal skills: 22%
- practical or hands-on skills: 17%
- cultural or artistic skills: 14%
- athletic skills: 5%

(N.B. Students were able to offer more than one area of strength.)

The primary purpose of this question is to encourage students to think about their strengths and competencies, rather than just their deficits, in the context of their day to day lives. It is encouraging that so many of them are able to identify their areas of strength. Although the actual percentages have varied from year to year, academic or school related skills have always been the one most frequently identified followed by social or interpersonal skills. It is interesting to note that, although many students with learning disabilities are encouraged to focus on vocational or athletic skills in order to enhance their self-esteem while in school, these statistics do not appear to support such grade school advice. .

On the other hand, it may be possible that these statistics reflect what the students *think* that the Task Force is looking for in terms of strengths and skills, in spite of the fact that the questions are entirely open-ended. When this topic was discussed with the members of the Committee of Reference, they were not surprised by the data. They observed that the students who successfully enter post-secondary education in spite of having learning disabilities are likely to be the ones who are most successful in school and who most value academic success. Perhaps others who have learning disabilities and who do not access post-secondary studies have too faithfully followed guidance discouraging college or university enrolment.

VII.5. Access to special education

When students were asked to identify when they were first told that they had a learning disability, they responded as follows, in a chronological sequence:

1. before starting school:	2%
2. in elementary school:	64%

3. in secondary school: 10%
4. after leaving school and/or
since arriving in college/university: 17%
5. never formally told: 4%
6. Don't know 2%

While the actual response percentages to this question have varied during the four years of pilot activity, the distribution has been consistent. This range of answers reflects the way learning disabilities are identified in the school system, mostly in elementary school, and far less frequently at a later stage.

However, our review of the data obtained through the validation process also brings into question the accuracy of the school system's identification practices. We have repeatedly noted with concern that a significant percentage of students who, on reassessment at the post-secondary level were shown not to have a learning disability, although they were identified as LD by an IPRC in the school system. Some of these students have mild intellectual disabilities or other conditions which interfere with effective learning, while others have no disabilities at all.

However, it is emphasized that there can be no question about the identification of the students whose data are included in this report, since they have all met the rigorous LOTF validation criteria and narrow definition of learning disability, erring on the side of exclusion.

It has been documented that post-secondary faculty often question the fact that some students are first identified as having a learning disability after they arrive at college or university. This late identification is often due to the fact that many students with learning disabilities cope adequately with the demands of elementary and secondary education through their innate ability, the coping strategies that they have developed for themselves, extremely hard work and the support provided and/or paid for by their families. Once they enroll in post-secondary studies, the changed expectations, the much increased pace and volume of studies and the level of assumed independence, coupled with the absence of helpful parents, result in the need to get help. This sometimes leads to a later than usual identification and recognition of their learning disabilities. However, advisability of earlier identification does not negate the importance of diagnosis and the provision of the necessary services and supports at the post-secondary level.

Question 21 focuses on the students' most recent assessments. Of those who responded, they identified their most recent assessment as dating from:
1. elementary school: 12%
2. secondary school: 19%
3. after leaving school, in college/university 67%
4. never: 0.4%
5. don't know: 2%

We are pleased to note that the percentage of students who report that they have never had an assessment or did not know about having an assessment has substantially declined from the previous years. But it is still a major concern that more than 12% of pilot students report that they have not had an assessment or have not had one since their elementary school days. The chances of the findings and recommendations of those assessments being accurate and adequate for post-secondary educational purposes are not great. Further, students who have learning disabilities **and** who proceed to post-secondary education are a minority. Therefore, we have to assume that the majority who go on to employment or job searches instead of post-secondary education have even lower level of understanding of their learning disabilities or accommodation needs.

From previous questions we know that the majority of the pilot students attended secondary school in Ontario during the past few years, i.e. since well after the implementation of the IPRC and other Bill 82 mandated processes. In spite of this,

- 23% of pilot students reported that to the best of their knowledge they were **not** identified as LD through the IPRC process and
- another 33% did not even know whether or not they had participated in or been the subject of an IPRC or not.
- only 44% of the participating pilot students stated that their learning disabilities had been identified by an IPRC.

Since some school boards still choose to utilize the "exceptional" designation without applying the Ministry of Education's definitions of exceptionalities, students were also asked whether they had been identified as exceptional by an IPRC.

- 17% of the pilot students reported that they were so identified

The level of apparent non-identification continues to be a major concern and one that LOTF has raised on numerous occasions with both the relevant Ministries. Given these responses, it is not surprising that such a large number of incoming students do not have adequate documentation or self-awareness of their LD. This has been documented by the pilot staff in their institutional tracking reports and confirmed by the consultants during the focus groups when they met with pilot students. The seriousness of this lack of previous assessment and information is particularly compelling, in contrast to the rigorous eligibility and validation criteria our pilots now utilize and the very high value students place on the demystifying information they receive based on these assessments.

When considering this information provided by eligible men and women (but not including the summer orientation students), these statistics certainly contribute to our ongoing concerns about gender inequality in terms of special education provisions within the school system.

248 students responded to this question in the intake questionnaire.

- 46 females and 47 males stated that they did not know whether they had ever been identified as LD by an IPRC. We can certainly draw the likely conclusion that these students did not participate in an IPRC in their last year of secondary school.

Of those students who apparently know the answer and remember,

- 56% of the females answered yes (38 out of 68)
- 71% of the males answered yes (62 out of 87).

This difference is significant. It confirms the fact, already well recorded, that more female students than males, even if they have clearly identifiable learning disabilities, are not identified and therefore receive no help during their elementary or secondary education.

When asked about having been labelled with the euphemism of "slow learner", 46% - almost one half - of participating students reported that this term was applied to them at some stage. This is most regrettable, when it is so important that both those who have learning disabilities and those who work with them fully understand that these students have average to above average intelligence and certainly should never be identified as or considered slow learners.

It is interesting to note that the gender breakdown in responding to this question is significantly different from the previous responses. Of those students who knew and remembered whether they had been labelled "slow learners", (i.e., answered yes or no)

- 55% of the females answered yes (57 out of 102)
- 56% of the males answered yes (58 out of 103).

Obviously the pejorative term "slow learner" is equally applied to male and female students. We have addressed the issue of gratuitous damage to students' self-esteem in previous reports. However, we feel that we should reiterate that the importance of appropriate identification and the use of terminology are really important components of what students such as our pilot students should be able to expect from the school system, especially given the legislated mandates under which schools are supposed to work.

- Over 23% of the total pilot student body reported that they did not receive any special education help in elementary or secondary school.

This is a major problem, when the provision of appropriate special education programs and services is mandated by law.

The most commonly cited forms of special education help available in secondary school included:

regular resource room support	25%
resource room help, ***if the students asked***	47%
help in the regular class	30%
doing exams differently	57%

(Please note that respondents were permitted to select more than one answer.)

The consultants continue to note with concern that "*resource room help, when asked for*" by the student, and exams written in a separate location are the most common forms of special education support provided in Ontario's secondary schools to these students. As before, we wish to stress how inadequate these forms of special education programming and service delivery are for students with specific learning disabilities, compared with what is possible.

Further, we note with significant concern that:

- just 8.5% of pilot students mentioned having access to assistive devices such as computers, taped books, etc.,

- only 16% had access to a special class placement either full or part time, and
- only 10.7% received any specific transition planning help.

We must also note that a number of students, unprompted, added in comments describing their extreme frustration with an absence of help. A very much smaller number spontaneously offered positive comments about individual teachers at their secondary schools.

VIII. The impact of having learning disabilities

VIII.1. Self-awareness and self-advocacy skills

Students' self-awareness of their strengths and needs and a competent understanding of their learning disabilities were identified as a key success indicator for every one of the LOTF pilot projects. Question 29 of the intake questionnaire asked pilot students to identify, based on their knowledge and understanding of their own learning disabilities, the categories of learning disabilities that they have. While there is no guarantee that the categories selected are clinically accurate, it is useful to track the students' awareness and understanding about their own learning disabilities. Question 15 of the exit questionnaire asked the same question of students.

Although the number of students who completed intake questionnaires is different from the number who completed exit questionnaires, given the size of the totals included in the database, these percentages have validity in indicating relevant trends in this regard.

Type of LD	Intake data as reported by students	Exit data as reported by students	Average of three years data reported by the pilot institutions
visual	38%	42%	33%
auditory/ language	54%	52%	67%
motor	13%	12%	11%
organizational	40%	39%	21%
conceptual	31%	32%	15%
non-verbal	10%	14%	7%
math	28%	29%	22%
other	13%	11%	3%
don't know	12%	<2%	<1%

(Please note that the totals do not add up to 100%, due to the fact that students were asked to check all categories that applied to them. Under "other" students typically wrote in ADHD.)

The pilot institutions were also asked to report on their knowledge of their students' categories of learning disabilities. In the first year of reporting there were some concerns about how these categories were to be utilized. But in the following three years the incidence of the various categories reported by the pilot institutions were quite reasonably consistent. Therefore, for comparison purposes, we are using the average of the information gathered from the pilots over a three year period and the consolidated percentages reported by the students in the intake and exit questionnaires.

Comparing the student and institutional responses, it is important to note the following:

1. Clearly, students were able to link the description of learning disabilities categories to their own particular difficulties as they understood them at the times of intake and exit. In the intervening period, many of them had a further assessments or even a preliminary assessment, clarifying the reason for their academic difficulties for the first time. The purpose of using these processing related categories in identifying specific types of LD rather than the traditional academic deficit areas was to encourage students to link their observable difficulties to potential coping strategies.

2. Not surprisingly, the majority of students and the pilot institutions report that most of the students' identified learning disabilities fall into the traditionally academically-linked visual and auditory/language LD categories. The actual percentages reported by the students and the pilot institutions have varied from year to year among these two broad categories of learning disabilities. However, there has been a remarkable consistency in the reporting of these data by each of the groups from year to year.

The discrepancies noted between the two categories of identified learning disabilities, i.e., visual and auditory/language, may reflect some of the ongoing debate about the nature of reading difficulties. Some people consider reading problems to be exclusively phonologically based, i.e., categorized exclusively under the auditory/language LD heading, while others believe and communicate to students that some reading problems have visual and processing speed related components and therefore can be legitimately categorized as visual/perceptual.

3. The decline in the numbers of students from intake to exit who report that they do not know the type or category of their learning disabilities is most encouraging. It was certainly LOTF's hope and expectation that no student would leave a pilot (unless they left very shortly after entry) with no knowledge and understanding of their learning disabilities.

4. Over the pilot period, the consultants have commented regularly on the difference between the incidence rates cited by students and by the institutions regarding organizational and conceptual learning disabilities. Students have consistently reported a much higher incidence rate for their organizational and conceptual learning disabilities compared to reports from pilot staffs.

We acknowledge that in many cases the pilot staff focus primarily on academic difficulties (reading, writing, spelling, etc.) which are more directly linked to visual and in particular language based (phonological processing) learning disabilities. Others have stated that they consciously chose not to focus on the possibility that their students may present with difficulties in the areas of reasoning or analysis, when they are deemed ready to participate in post-secondary education. Yet many successful adults with learning disabilities typically cite organizational and conceptual problems, including social skill deficits and the ability to deal with and comprehend non-verbal information, as the greatest barriers to their life success, ahead of the academic deficits that they faced while participating in formal education.

Clarification of these differences and their implication for the future employment and life success of students with learning disabilities is an area that merits further research.

5. Although the students identified non-verbal learning disabilities (NVLD) at a higher rate than the institutions, there is a question about how well any part of the educational system identifies and serves such students. The recent increase in the incidence of students identified with Asperger's Syndrome and the apparent confusion between that condition and non-verbal LD have created a diagnostic problem not yet resolved. It is our observation that further research into and focus upon NVLD are required.

6. Attention Deficit Hyperactivity Disorder (ADHD) is a condition which is identified in a very large number of students in Ontario and many students are using medication to control it. In spite of some ongoing debate, ADHD is not generally considered to be a learning disability, although it occurs on a co-morbid basis with LD very frequently. ADHD is not identified as a specific exceptionality by the educational system for special education programming purposes. Of the pilot students, 27% reported that they have been identified as having and may have received treatment for ADHD. As mentioned earlier, many of them wrote in ADHD under the other category in their description of their specific LDs.

- Thirty-four percent of the pilot students reported that they had been identified at some point as having dyslexia. This is particularly interesting since the school system does not use the term "dyslexia" in its identification processes or the provision of special education programs.

Question 33 of the intake questionnaire addressed the students' self-awareness of their LD and ability to self-advocate. Question 17 of the exit questionnaire asks the same question. Again it is important to note that these are not the exactly the same students and the sample size is different. However, it is still useful to compare these response ranges. The pilot institutions have also been asked to estimate, using their own criteria, their students' skills in these three categories. For comparison purposes, we are using the data provided by the institutions in the last year of reporting, 2001/02.

On the intake questionnaires, regarding understanding of their LD;

- 48% of the students reported that they had a very good or good understanding.
- Another 36% of students reported that they have an OK or adequate understanding.
- 15% of the students reported that they have a poor or very poor understanding.

Regarding their ability to explain their learning disabilities:

- 38% of the students state that they can do this very well or well.
- Another 34% of the students state that they have an OK or adequate ability to explain their learning disabilities.
- 29% state that they explain their learning disabilities poorly or very poorly.

Regarding their self-advocacy skills:

- 45% of students state that they have good or very good advocacy skills.
- Another 36% students state that they have an OK or adequate ability to be their own advocates.
- 19% of students identify themselves as having poor or very poor advocacy skills.

On the exit questionnaires, regarding understanding of their LD:

- 75% of the students reported that they had a very good or good understanding.
- Another 21% of students report that they have an OK or adequate understanding.
- 4% of the students report that they have a poor or very poor understanding.

Regarding their ability to explain their learning disabilities:

- 56% of the students state that they can do this very well or well.
- Another 29% of the students state that they have an OK or adequate ability to explain their learning disabilities.
- 15% of the students state that they explain their learning disabilities poorly or very poorly.

Regarding their self-advocacy skills:

- 63% of students state that they have good or very good advocacy skills.
- Another 22% of students state that they have an OK or adequate ability to be their own advocates.
- 14% of students identify themselves as having poor or very poor advocacy skills.

Pilot staff collectively reported the following about their students in the fourth year of piloting.

Regarding their understanding of their LD;

- 48% of the students were identified as having a very good or good understanding.
- Another 42% of the students were identified with an OK or adequate understanding.
- 8% of the students were reported as having a poor or very poor understanding.

Regarding their ability to explain their learning disabilities:

- 42% of the students were identified as being able to do this very well or well.
- Another 44% of the students were described as having an OK or adequate ability to explain their learning disabilities.
- 13% of the pilot students explain their learning disabilities poorly or very poorly.

Regarding their self-advocacy skills:

- 52% of the students were identified as having good or very good advocacy skills.
- Another 37% of the students were noted as having an OK or adequate ability to be self-advocates.
- 10% of the students were seen by pilot staff as having poor or very poor advocacy skills.

The proportion of positive responses to these questions from both students and staff have gradually increased over the past four years. At the same time, the percentage of students who identify themselves as having poor or very poor understanding of their learning disabilities, ability to explain their learning disabilities and self-advocacy skills has remained fairly constant. It has previously been suggested that trends indicating no discernible improvement, as perceived by students, between intake and exit responses may reflect the fact that because exiting pilot students have a greater awareness of what successful self-advocacy is all about, they recognize that they do not in fact have all these much needed skills. Students who are leaving, especially prior to graduation, may be particularly insecure in this regard.

When looking at the gender breakdown among student responses to these questions, they basically reflect the actual gender proportions of the total pilot student population.

In the progress questionnaire responses to a more general question about their self-awareness,

- 85% of responding students indicated that they understood their learning disabilities **better** than when they first started in the pilot project.

When asked what helped them most to achieve this improved understanding, the majority volunteered a response about having an assessment carried out (52%) and its results explained to them by knowledgeable and caring pilot staff (16%). An additional 17% of students who responded positively to this question cited various pilot project components as additional helpful factors.

In the exit questionnaire responses to a parallel question about self-awareness,

- 85% of responding students again indicated that they understood their learning disabilities **better** than when they first started in the pilot project.

When asked what helped them most to achieve this improved understanding, the majority of positive respondents specifically cited having an assessment or re-assessment carried out (63%) and its results explained to them by pilot staff (10%). The balance more generically reported the value of "pilot components" and staff supports as the reason.

Of those students who did not respond positively to this series of questions on either the progress or exit questionnaires, the most common explanation offered was that they already knew "all about" their learning disabilities before entering the pilot. There were no criticisms of pilot staff activities or pilot components and services offered as a reason for the lack of improvement.

VIII. 2. The more general impact of having learning disabilities

One intake question asked students about the overall impact of their learning disabilities on their day-to-day life. The following are the consolidated responses received over the four years:

- 35% reported that the impact was mild,
- 46% reported moderate and
- only 6% stated that there are severe impacts.

These responses are almost identical to those reported during each of the previous three years of reporting.

In question 30 of the intake questionnaire, students were asked to comment on their areas of academic or school based difficulties. Since they were able to respond to this on the basis of "check all that apply", the numbers once again add up to more than 100%. The following percentage of students reported their difficulties as:

reading	61%
writing	65%
spelling	76%
math	55%
listening	30%
speaking	17%
memory	51%
analytical skills	17%
reasoning	7%
organizational skills	33%
understanding abstract concepts	32%
study skills	45%

It is worth noting that the reported range of academic difficulties has been consistent over the four years of piloting period. Although many academics and most researchers in the field tend to focus on LD students' reading difficulties, the students report that their problems with writing and spelling in particular are more problematic for them than their reading difficulties.

Every one of the pilot institutions have worked hard at introducing their pilot students to assistive technology which assists with carrying out tasks, which primarily depend on the ability to decode and encode language. Resources such as the Kurzweil reader, voice to text software of various kinds such as Dragon Dictate or TextHelp go a long way to assisting students with learning disabilities to compensate for their difficulties. Of course, the learning disability does not go away when the student utilizes the technology. But it goes a long way to assisting the student to focus on his or her strengths, rather than having to struggle with tasks in their areas of difficulty.

In question 31 of the intake questionnaire, students were asked to comment on what aspect of their lives their learning disabilities impact the most.

- 85% reported that academic learning and their education are most affected.
- 47% mentioned self-esteem,

while a much smaller percentage mentioned social relationships, day-to-day life skills and/or employment related difficulties. This response range is not at all surprising and confirms published research findings related to self-awareness and understanding. However, other research suggests that students with LD often do not recognize the non-educational impacts of their difficulties fully, and we suspect that this may the case here.

In question #16 of the exit questionnaire, students were asked to answer the same question again. This time,

- 84% reported that academic learning was still the area most affected by their learning disabilities
- while 44% mentioned self-esteem.

These statistics do not necessarily reflect any apparent changes in the subjectively reported impact of having learning disabilities. However, the anecdotal feed-back provided by many students during our focus group meetings indicated that the students accepted and understood their learning disabilities much better than was the case previously. Understanding and acceptance are key prerequisites to improved self-esteem and the ability to cope with the negative impacts of having learning disabilities.

When these statistics are broken down according to gender, the percentages shift. Within the total population, there were 46.5% women and 53.5% men. On the intake questionnaire, the breakdown for the areas most affected by having learning disabilities were reported as follows:

- academic learning - women: 48% and men: 52%, which is not significantly different from the total participation rates;
- self-esteem - women: 57% and men: 43%.

At the time of the exit questionnaire, these percentages were reported as follows:

- academic learning - women: 49%, men: 51%
- self-esteem - women: 55%, men: 45%.

While there is no obvious clear cut explanation for these differences, the question does arise: does the later diagnosis of learning disabilities for many women compared to their male peers lead to a greater negative impact on self-esteem? If that were so, it would certainly support the requirement for earlier accurate diagnosis of learning disabilities for both girls and boys within the school system.

IX. Accommodations

Question 35 of the intake questionnaire lists a long series of accommodations. Students were asked to identify which of these they received in secondary school and which they consider essential for their success in post-secondary education.

As was the case in our previous reports and as is typical of reporting on students' accommodation requests, extra time is the accommodation that is selected by the largest number of responding students (87%) as essential for their academic success. At the same time, when responding to what was available to them in their secondary school years, only 67% of the students indicated that they had access to extra time for exams, essays or assignments.

The remainder selected as "essential" for their post-secondary education by the majority of the responding students included:

- exam questions rephrased or clarified (63%)
- assignment previewed by teachers (62%)
- separate quiet exam location (62%)
- assistive devices (59%)
- not having marks deducted for spelling or grammar errors (62%)
- subject specific tutoring (52%)
- note taker or access to someone else's notes (53%)
- having complex things explained in different ways (48%)
- written material available in advance (48%)
- learning strategy tutoring (51%)

In addition to the 67% of the students who indicated that they had extra time in secondary school, the only other one of these accommodations that was available to a significant percentage of the pilot students was the separate quiet exam location, provided to only 50% of the responding students.

It is important to note that as students continued to participate in the pilot projects, the value that they assigned to the availability of assistive devices and access to learning strategies increased significantly.

The provision of suitable and reasonable accommodations is a very important part of providing services and supports to students with learning disabilities. However, it is particularly important that the form of accommodation be based on the students' individual strengths and needs and that students be able to explain to faculty why they need the specific form of accommodation requested. For students with learning disabilities this is one of the most important life and employment skills that they will need in the future. All pilot projects worked on identifying and sharing with the LOTF how they linked the students' identified learning disabilities to the types of accommodations and technology that the students found most useful. This information has been shared with the other colleges and universities and is available from LOTF to all secondary schools in the Province.

X. Utilizing the pilot project components

In the progress questionnaire, students were given a list of the pilot project components that were available to them, as described in the unique business plan of each of the pilot institutions. In the following table all 16 program components are listed. Some of these were available at all the pilot sites, while others were not universally available. The calculation of the percentage of students who reported that they were using this component and the percentage who indicated that they plan to use it in the near future is based only on the total number of progress questionnaires received from those institutions where the component was available.

Components	Used by	Plan to use	Total
Offered by all ten pilot institutions:			
assessments	64%	6%	74%
self-advocacy training	37%	16%	53%
computer lab and assistive / adaptive technology	63%	14%	77%
learning/metacognitive strategies	54%	15%	69%
counselling	60%	8%	68%
Offered by nine pilot institutions:			
academic accommodations	63%	10%	73%
exit transition	15%	46%	61%
peer mentoring or tutoring	41%	21%	62%
Offered by eight pilot institutions:			
entry transition	25%	8%*	33%
Offered by six institutions:			
advising and goal setting	38%	19%	57%
Offered by four institutions:			
specialized credit course	40%	7%	47%

Offered by three institutions:			
social skills training	17%	12%	29%
Offered by two institutions:			
college success course	34%	11%	45%
peer support group	30%	18%	48%
summer orientation to the pilot	49%	8%*	57%
Offered by only one institution:			
communication support**	76%	7%	83%

Notes related to the above response rates:

* Sometimes the indication that students plan to use a component does not make sense, when it refers to something, such as "transition to post-secondary" or "orientation to the pilot", when the responding students are already participating students.

** Specialized communications support was an integral part of the Transition to College for Students with Learning Disabilities Program at Cambrian College. This clarifies the high utilization rate.

Summer orientation to the pilot as a reported program component did not include the formal summer projects at York University and Cambrian College.

The percentage of students who reported that they utilized these various program components was not as high as we would have expected or indeed as reported by the institutions in their questionnaires.

Some of the noted discrepancies between the utilization reported by the students and the institutions may be explained in a number of ways. For example, assessments are a one time activity. Students who completed progress questionnaires more than once, would not have reiterated its use as a program component when in their second or third year or semester with the pilot project. Similarly, students who have taken a special course covering self-advocacy skills and self-awareness in a particular year may not recognize and report the ongoing reinforcement of self-advocacy skills integrated into other program components, such as counselling.

Students vary significantly in their actual and perceived strengths and needs and therefore in their programming requirements. However, the above percentages indicate that students tend to value and participate in program components that provide them with:

- greater levels of self awareness and an understanding of their learning disabilities (assessment, self-awareness and self-advocacy training and individual counseling); and
- advance their educational success and achievement (assistive technology, accommodations, individual advising and planning and metacognitive and learning strategy training).

On the other hand, they do not appear to value to the same extent or utilize components that they do not see as directly benefitting their educational achievement, e.g., social skills training, college success courses and self-help support groups. Also, the consultants note with concern the very limited participation in the exit transition program components, available at most of the pilot institutions. This does not mean that these components are not or cannot be beneficial to the students, but rather that they do not recognize the benefit and choose not to participate. Further exploration of improved methods for providing these supports might be advised, with due attention to students' actual priorities and work loads.

XI. Barriers

When the LOTF began its work, one of the first issues that the consultants considered were the barriers that students face when they apply to or are enrolled in college and university. These barriers may relate to the admission process, the need for a recent assessment, the work of the special needs office and the support that they can provide to the student, the attitude of faculty members and their willingness to accommodate students with learning disabilities as well as the fate of students who do not disclose that they have a learning disability.

The barriers preventing or hindering post-secondary educational success for many students with learning disabilities identified by the students themselves in the preliminary research were as follows:

External or institution-related issues:

- transition and preliminary application process;
- admission and entry;
- participation in the student's choice of courses, including accommodation in the classroom, laboratory, examinations and tests;
- access to resources, including adaptive technology/assistive devices; funding including but not limited to OSAP and the Bursary for Students with Disabilities;
- support for graduation and post graduation services.

Intrinsic issues that students identified related primarily to their awareness and understanding of their LD and its implications for their studies and future career options.

In the progress questionnaire, participating pilot students were asked whether they were aware of a specific barrier to their studies. Of the total number of students who responded to progress questionnaires,

- 32% identified that in spite of their participation of the pilot, they still were aware of a barrier to their academic success.

These were identified by over 64% of the responding students, as problems with:

- faculty attitudes and
- systemic barriers present within the institution.

A few students cited certain academic barriers, such as professors' refusal to allow students to use assistive devices such as tape recorders in the classroom.

The responses to all of these questions reinforced for the pilots the importance of including in their student support and self-advocacy training activities a process which would ensure that the students were able to determine what accommodations and supports are legitimate, given their strengths and needs, and which ones they can reasonably advocate for and expect to receive, both in their post-secondary education and their future employment.

Secondly, there is no question that professional development for faculty and systemic interventions to advance adherence to fundamental human rights continue to be much needed commodities at all institutions.

As part of the LOTF's legacy planning, all pilot institutions were asked to review their internal policies with a focus on improving, enhancing and strengthening the implementation of their special needs and accommodation policies. Such policies must be in line with the **Canadian Charter of Rights and Freedoms** as well as provincial Human Rights legislation. They might have required significant changes in terms of implementation, active evaluation and accountability, such that meaningful enactment is the routine experience of the vast majority of students with disabilities. It is also LOTF's hope that the requirements for Accessibility Plans under the **Ontarians with Disabilities Act** will eventually also ensure that post-secondary education institutions meet the needs of their students with disabilities in the areas of both physical **and** learning environmental access and accommodations.

A number of students also experienced disadvantage as students with learning disabilities who are trying to participate fully in post-secondary education. By that, they must appear to mean that even though these pilot projects were in place, at some institutions there continued to be a lack of understanding of what learning disabilities are and/or lack of acceptance of students with LD as competent students. A number of them mentioned that their pilot project does help with eliminating these barriers, especially since it is more acceptable to have a learning disability now that the pilot project is visibly in place. Several students also added comments acknowledging pilot staff individually and collectively and/or thanking LOTF for its support of the pilots and of the students themselves.

Some students identified their own personal attitudes and approaches to their studies as the principal internal barriers for them. When asked to identify what is needed to eliminate any of the identified barriers, not very surprisingly, the students mostly suggested a direct elimination of the specifically cited barrier, through such activities as faculty training, reduction of certain expectations, and other systemic changes including the availability of more funding for both students and the institutions. The fact that some pilot students have had to drop out because they were too poor to continue studying underlines the seriousness of these funding issues.

In conclusion, the progress questionnaires indicate that most of the responding pilot students felt that they were:

- well supported in the pilot project,
- benefiting from the pilot and
- generally doing well in their studies.

These positive comments were most encouraging to the Task Force and reflected well on the pilot projects.

XII. Looking ahead

XII.1. The pilot students' future goals

It is interesting to note that

- 80% of the students stated in their intake questionnaires that they have a career goal.

When asked to elaborate, a significantly smaller number, 46% in total, mentioned a specific job or career. For many of the others, their future goal is to get some more education before embarking upon a career, which may not be defined at all at this time. The small percentage of those with specific as opposed to vaguer career goals is not particularly surprising at the outset of post-secondary studies.

In the equivalent exit question,

- 85% of responding students stated that they had a career goal. 54% of those who responded positively to this question indicated a specific career goal, rather than providing a vague answer or indicating that they did not know.

- 77% of responding students indicated on their exit questionnaires that their career goal is directly linked to their course of studies.
- 96% indicated that their career goal builds on their areas of strength.
- 77% indicated that they know what type of on the job accommodation they will require in order to get and keep their jobs.

These are all positive and encouraging responses. One set of less positive responses identified that

- only 53% of responding students felt that their career goal helps them avoid having to function in their most significant areas of weakness.

This is a topic that the consultants have addressed many times with both the pilot students and staff. One key success indicator for people with learning disabilities is the need to recognize what areas they should try to avoid in career and job selection. However, many students still appear to feel that this type of approach is "cheating" and that they should continue to try to improve their performance in their area of weakness, rather than focus and build on their areas of strength and avoid their areas of weakness as much as possible. Perhaps this continues to reflect the "remediation" rather than coping and compensating approach that continues to persist within the special education systems of most school boards in Ontario.

Regarding being ready to search for a job,

- 42% of the students who answered this question stated that they are **very** prepared and
- another 47% are **somewhat** prepared for this task.

Regarding their confidence about explaining their learning disabilities and accommodation needs to an employer,

- 22% of responding students report that they feel very confident about this.
- 47% of responding students stated that they were quite confident about this.

It is notable that the earlier cited percentage of students who responded positively to general questions related to their ability to explain their learning disabilities was much smaller than the percentages reported immediately above. We question whether enough students fully appreciate the importance of this task for their future successful employment, a concern underlined by the occasional student comment objecting to the very question on the assumption that self-disclosure must always be a dangerous step. Nevertheless, the increased number of students comfortable with self-identification is encouraging.

Many studies suggest that students with learning disabilities within the secondary school sector often have quite unrealistic future plans. This is part of the reason why transition planning has been mandated for all students with disabilities who are 14 years of age or older. However, only 10.7% of incoming pilot students mentioned that they received transition help before leaving secondary school.

Therefore, the relatively high positive response rate to the question about having a future goal may reflect the fact that this is a pre-selected group of students who have already satisfied the entry requirements for post-secondary education, who met the requirements for having at least average intellectual functioning and who may have received more than average support from home. This last supposition is derived from the fact that 40% of these students state that their parents were the ones who explained what having a learning disability means and what their specific learning disabilities are.

XII.2. Transition for exit

Although the majority of the pilot projects committed to including career education or other exit transition planning components in their program offerings to assist students with their future plans, in response to the exit question related to that program component 29% of the students who responded indicated that they did not participate in any of the listed structured transition programming.

Given the listed exit questionnaire options, the students indicated participation as follows:

- a structured process for students with LD, such as using the LEAP manual or something similar: 13%,
- an individualized career selection process: 31%
- having an updated career assessment designed to assist with transition plans: 26%
- individual career and/or vocational counselling: 16%
- LD specific job search training: 12%
- group career or vocational counselling: 6%
- co-op placements related to the student's course of study, but not LD specific: 21%
- credit course on world of work or job preparation: 10%
- referral to an external agency for job placement or counselling: 6%
- none of the above listed services: 29%

Although the students who responded to the exit questionnaires presented quite a positive attitude towards their ability to search for a job and advocate for job place accommodations, the consultants were concerned about the low rate of participation in the career education and transition planning components of the pilot project offerings. Job readiness is one of the key success indicators identified by LOTF. It would appear that those students who participated in transition planning activities are indeed reasonably job ready. But with such a large number of pilot students not participating in any transition planning activity, this has remained a utilization gap in the pilot institutions' program offerings, likely a serious one given the available statistics on under-and unemployment for persons with learning disabilities.

XII.3. Leaving the pilots

Data obtained from the exit questionnaires

A total of 501 exit questionnaires were returned by pilot students. When asked on the exit questionnaires whether they were leaving the pilot project only or the pilot institution as well,

- 56% of responding exiting students indicated that they were leaving both.

Exiting students cited the following reasons for leaving the pilots:

- 38% were graduating
- 26% completed their courses of study
- 10% were dropping out of the program, but not necessarily from school
- 5% were dropping out of school
- 7% were withdrawing for personal reasons
- 6% were withdrawing for financial reasons
- 5% were transferring to another institution.

Under the category of other, 21% of the responding students reported that their reason for leaving the pilot was the fact that the pilot was ending. The next most common reason, but reported at a much lower level (4.6%) was the fact that they no longer needed the pilot services. We were pleased to note that only four students indicated that they were leaving due to dissatisfaction with the services offered (less than one per cent) and 2.8% of the responding students reported that they were asked to leave.

Of those who indicated that they had graduated and responded to a question about attainment,

- 33% received a certificate
- 49% received a diploma
- 14% reported that they received a degree.

Data obtained from the exit proxy forms

There were 414 exit proxy forms submitted by the pilot institutions. Of these students, 59% were leaving both the pilot project and the institution.

The following other reasons were cited for leaving the pilots by pilot staff:

- 28% were graduating and/or had completed their courses of study
- 14% were dropping out of the program, but not necessarily from school
- 18% were probably dropping out of school
- under the "other" category, the majority were reported as leaving because the pilot was ending

(N.B. Staff were able to check more than one answer to this question.)

Comparing the data obtained from the exit questionnaires, completed and returned by students and the proxy forms, completed and returned by staff on behalf of students, there are significant differences between the percentage of students who are dropping out of the program and out of school. This discrepancy should be expected, as students less academically successful or facing financial or other difficulties are less likely to complete an exit questionnaire. In spite of these reported drop out rates, pilot staff judged that 89% of these students benefited from participating in the pilot project.

However, many of these students apparently did not participate in any transition planning activities prior to their departure. Of those who had, the most common type of support was individual career or vocational counselling.

Pilot staff also indicated that while some of these students had not been ready to participate successfully in post-secondary education or were not prepared to commit to utilizing the recommended pilot project components, many others will continue to receive services through Disability Services or the Enhanced Services Projects, starting in September, 2002.

XIII. Looking at the summer orientation programs at Cambrian College and York University

The database contains 97 summer intake and 93 summer exit questionnaires from the past four years. These include 25 intake questionnaires from the students at Cambrian College and 72 from the students enrolled in Project ADVANCE at York University. Exit questionnaires were received from 24 students at Cambrian and 69 at York.

In the first year, the summer of 1998, there were no special intake and exit questionnaires. Therefore, those questionnaires and the data that they contained were blended with the other 1998/99 data. During that summer, there were 16 summer students at Cambrian College and none at York. Cambrian's summer orientation program was initially a two week program, primarily geared towards its own incoming students. In the last year, the program was reduced to a one week intensive program and the students did not complete questionnaires.

York's is a longer and more intensive six week program, serving new high school graduates starting their university or college studies following completion of the orientation program. Because of these significant differences in program type and the background of the students, it is not always useful to compare the results of the two programs.

However, it is possible to draw comparisons between the cumulative summer intake and exit questionnaire data, given that the students who completed both sets of questionnaires within each institution were essentially the same individuals.

All students participating in these summer orientation programs were secondary school graduates, with the majority having graduated between 1998 and 2002. While most of them had not previously attended any other post-secondary educational institutions, there were a few students who had started out on their university or college studies, dropped out and were beginning again, after deciding to take advantage of the transition programming available at York and Cambrian. As is the case for all other pilot students, these students planned to study a wide range of subjects when leaving the summer programs.

On the intake questionnaire, 78% of the students indicated that they had a career goal at the start of their program. While this percentage is close to that reported by the larger group of pilot students, it is interesting to note that 63% of the students reported a specific goal, a higher percentage than that reported for the larger group.

Not surprisingly, there are significant differences in some of the reported secondary school experiences. For example, the college group reported that they took mostly general level courses with only four students reporting basic and two reporting advanced level. On the other hand, almost all the Project ADVANCE students took their secondary school courses at the advanced level (92%).

It is interesting to note that the reported rate for repeating a grade is much lower for this group of students than for the general group. As mentioned earlier in this report, over the past four years

35% of the students have typically reported that they had repeated a grade, with a breakdown of 41% in college students and 21% in university students. For these summer students, only 23% in total reported that they had repeated a grade. These percentages are not consistent, however, with 52% of the college students reporting that they had repeated a grade and 13% of the Project ADVANCE students reporting the same.

Parental attitudes can have quite an influence on their children's post-secondary education. However, the financial circumstances of families will influence the ability of students to participate in such summer programs. Spending six weeks in a transition program between leaving school and entering post-secondary education calls for significant parental support, both morally, in terms of encouragement, and financially. The students involved with Project ADVANCE frequently spoke of significant levels of parental support and even occasional parental pressure for them to participate in the program and to do everything possible to move into a university level post-secondary education. At the same time, many other families would like to support their children similarly but cannot do so. They often cannot afford their children not working, especially at a time when the family will face the high costs of post-secondary education, often without OSAP eligibility.

When it comes to subjects that were problematic or that the students particularly liked in secondary school and their particular areas of strength, these students reported very similar categories similar to the larger group. In other words, they enjoyed a wide range of academic subjects and had their greatest difficulties with English and Math.

When it came to areas of strength, this group of students demonstrated an interesting pattern. The college group identified the full range of strength groupings, with no particularly outstanding area. Among the Project ADVANCE students, academic achievement outnumbered all the other responses put together.

The majority of the summer program college students were first told that they had a learning disability when they were in elementary school (76%). This was not the case for the university students, 30% of whom were first told that they had learning disabilities in secondary school. This may reflect the experiences of some of the very bright students with learning disabilities, both college and university bound, who can manage to get through much of their schooling without having their learning disabilities identified at all. The fact that only a few of these students reported that they had repeated a grade at some stage supports this possibility.

The majority of these students had their most recent assessment in secondary school, (57%) which is the expected response, given that the majority were very recent secondary school graduates. 24% of the group have not had a re-assessment since their elementary school days. While a significant number of the Project ADVANCE students reported that their assessment was done by a psychologist, almost 30% of the total group did not know who did their assessment. For both groups, their primary source of explanation about their learning disabilities were their parents.

Thirty-six per cent of the college students and 57% of the university bound students reported that they were identified through the IPRC process as having a learning disability. It is of concern that over 40% of the total group did not know whether they had been identified by an IPRC. Given that these students were all recent graduates of the secondary system and were of an age to participate in their own IPRCs, their lack of knowledge or memory of such an event is particularly worrisome. On the other hand when it comes to the use of the "slow learner" epithet, 35% of the college students and 46% of the university students reported that they recall being told that they were "slow". It is hard to determine the reason for this, unless there are individual variations in recall.

When compared to the larger group of pilot students, both of these groups of students reported a higher than expected rate of special education help in both elementary and secondary school.

In reviewing the types of special education help available to them during their last years in secondary school, the range and type of help is vary similar to that reported by the other pilot students. Help in the regular class and resource room help, especially when the student asks for the latter, are the most commonly reported forms of help provided. Many of these students reported that the only help available was the opportunity to do their exams in a location separate from their peers.

None of the college students and only 15% of the university students had access to any assistive devices or adaptive technology during their secondary school years. Of the total summer group, 18% reported that they had access to some transition related support in secondary school, a higher figure than the large group, but still representing limited support in this regard.

The one area where this group of students showed a major difference from the larger group of pilot students and from one another was in the reported access to private tutoring, paid for by the students' parents. Among the college group, 12% indicated that they had access to this. When it came to the Project ADVANCE group of students, 42% had this opportunity, once again reflecting the level of family finances as well as parental commitment.

As is the case for all other students, the summer orientation students were asked in both the intake and exit questionnaire about their understanding of their types of learning disabilities. Although these students are exempted from the formal LOTF validation process, these programs include significant emphasis of understanding their available assessment results and the impact of their learning disabilities on their learning and other functional skill areas. The students reported the following learning disability categories:

Cambrian College students:

	Intake	**Exit**
visual	48%	42%
auditory/language	56%	75%
motor	20%	29%
organizational	56%	54%
conceptual	40%	38%

non-verbal	28%	4%
specific math	48%	54%

Project ADVANCE students:

	Intake	**Exit**
visual	39%	40%
auditory/language	44%	60%
motor	19%	33%
organizational	60%	46%
conceptual	24%	35%
non-verbal	17%	19%
specific math	22%	27%

On the summer intake questionnaire, four students at each of the institutions reported that they did not know what category of LD they had. Regrettably, at the time of the exit questionnaire completion, three students for each of the institutions still indicated that they did not know the category of their LD. The increase in the self-reported auditory/language based learning disabilities is quite significant from the time of the intake to exit questionnaires. It is interesting and baffling to note the reduced percentage of college students who on the exit questionnaires report that they have non-verbal learning disabilities. However, since the briefer summer program is followed by offers for continued supports, including (re-)assessments where required, student self-knowledge may ultimately alter. Alternatively, the reported rates may be confirmed.

There is no obvious explanation for these results. Although the total numbers included in this section of the report are much smaller, they are still large enough to be considered valid.

Another area where these summer students' responses differ from the responses received from the other pilot students is when they disclose the academic difficulties that result from their learning disabilities. Most pilot students have over the four years of pilot activities reported difficulties with spelling and writing as their area of greatest difficulty, followed by their problems with reading. The summer students also report writing and spelling as their greatest area of difficulty, followed closely by math and memory as equally difficult. Reading and organizational skill deficits are the next highest reported areas of academic deficit for the total group. However, the breakdown between the two groups shows quite a difference:

	Cambrian College group	**Project ADVANCE**
reading	48%	33%
writing	56%	44%
spelling	72%	36%
math	68%	38%
memory	64%	31%
organizational skills	36%	38%
knowing how to study	52%	35%

In responding to the questions about the impact of their learning disabilities, the combined summer student cohorts responded as follows.

	Intake	Exit
academic learning and education	87%	96%
social relationships	26%	37%
day to day life skills	20%	30%
employment	18%	20%
self-esteem	51%	57%

It is interesting to note that both on the intake and exit questionnaires, the impact reported by the Project ADVANCE students was greater in two categories, social skills and self-esteem, compared to their college peer group. On the other hand, the percentage breakdown for the academic learning area for the two groups is almost identical. We noted some gender differences in this area in the larger group of students. However, that does not apply to the summer participants, since there were significantly more men than women enrolled in both groups.

While the overall range, academic learning followed by self-esteem, is the same for this small group of students as for the total group, there was a dramatic increase in the reported perception of impact on academic learning and education from the time of the intake questionnaire to the exit questionnaire. This was particularly noteworthy for the group at Cambrian College.

Regarding their self-awareness and self-advocacy skills, the summer orientation students responded as follows:

At Cambrian College

On the intake questionnaires, regarding understanding of their LD;

- 20% of the students reported that they had a very good or good understanding.
- Another 60% of students report that they have an OK or adequate understanding.
- 20% of the students report that they have a poor or very poor understanding.

Regarding their ability to explain their learning disabilities at the time of intake:

- 24% of the students stated that they can do this very well or well.
- Another 56% of the students stated that they have an OK or adequate ability to explain their learning disabilities.
- 20% stated that they can only explain their learning disabilities poorly or very poorly.

Regarding their self-advocacy skills at the time of intake:

- 25% of students stated that they have good or very good advocacy skills.
- Another 38% students stated that they have an OK or adequate ability to self-advocate.
- 38% of students identified themselves as having poor or very poor advocacy skills.

At Project ADVANCE:

On the intake questionnaires, regarding understanding of their LD;
- 46% of the students reported that they had a very good or good understanding.
- Another 30% of students reported that they have an OK or adequate understanding.
- 24% of the students reported that they have a poor or very poor understanding.

Regarding their ability to explain their learning disabilities at the time of intake:
- 42% of the students stated that they can do this very well or well.
- Another 28% of the students stated that they have an OK or adequate ability to explain their learning disabilities.
- 31% stated that they can only explain their learning disabilities poorly or very poorly.

Regarding their self-advocacy skills at the time of intake:
- 38% of students stated that they have good or very good advocacy skills.
- Another 34% students stated that they have an OK or adequate ability to self-advocate.
- 28% of students identified themselves as having poor or very poor advocacy skills.

At Cambrian College:

On the exit questionnaires, regarding understanding of their LD:
- 46% of the students reported that they had a very good or good understanding.
- Another 21% of students reported that they had an OK or adequate understanding.
- 33% of the students reported that they still had a poor or very poor understanding of their learning disabilities. This is a significant increase from the time of intake. These responses may actually reflect a greater awareness of the complexity of understanding their learning disabilities, than was the case at the time of completing the intake questionnaire.

Regarding their ability to explain their learning disabilities at the time of their exit:
- 38% of the students stated that they can do this very well or well.
- Another 29% of the students stated that they have an OK or adequate ability to explain their learning disabilities.
- 33% of the students stated that they explain their learning disabilities poorly.

Regarding their advocacy skills:
- 54% of students stated that they have good or very good advocacy skills.
- Another 33% students stated that they have an OK or adequate ability to self-advocate.
- 12.5% of students identified themselves as having poor advocacy skills.

It is worth noting that no students responded that they had **very poor** advocacy skills and the total percentage reported declined significantly. This is a most encouraging trend, albeit based on a very small population.

Project ADVANCE:

On the exit questionnaires, regarding understanding of their LD:

- 73% of them had a very good or good understanding.
- Another 15% had an OK or adequate understanding.
- 12% of them had a poor or very poor understanding of their learning disabilities. This is an encouraging decline from the time of intake.

Regarding their ability to explain their learning disabilities at the time of their exit:

- 62% of the students stated that they can do this very well or well.
- Another 31% of the students stated that they have an OK or adequate ability to explain their learning disabilities.
- 7% of the students stated that they explain their learning disabilities poorly, an encouraging decline from the reported intake rate.

Regarding their advocacy skills:

- 63% of students stated that they have good or very good advocacy skills.
- Another 27% students stated that they have an OK or adequate ability to self-advocate.
- 10% of students identified themselves as having poor advocacy skills.

Just like the reported data for Cambrian College, no students reported that they had **very poor** advocacy skills.

The list of essential accommodations reported by the summer pilot students closely matched the range reported by other pilot students.

Key demographic data for the summer pilot student group included the following:

- the date of birth for the Cambrian students ranged from 1957 to 1982, with 68% reporting a birth date between 1980 and 1982
- the date of birth for the Project ADVANCE students ranged from 1980 to 1984
- 79% were born in Ontario
- 91% were born in Canada; all summer students who were not born in this country were Project ADVANCE students
- 94% have English as their first language
- 3% have French as their first language
- 8.5% reported that they are of Aboriginal background
- 58% are male
- 42% are female

The majority of the students stated that their goals in enrolling in the program were primarily academic, including upgrading their academic and/or study skills and/or preparing for post-secondary education.

Almost all responding students stated that the program that they participated in was helpful to them.

- 72% stated that it helped very much
- 25% stated that it helped somewhat.

In describing what was most helpful to them, the students referred to specific pilot components and support provided by pilot staff in general or named pilot staff. The majority of the students did not cite anything that was **not** helpful. However, a number of Project ADVANCE students had some very specific recommendations for the structure of the summer project. Some of these were communicated to the staff of Project ADVANCE and the following year's program reflected these recommendations. Some students felt that such a transition program should be more personalized and that they should be able to select what personalized strategies they were taught, rather than being exposed to the full range.

In one question students were asked to indicate what, if anything, they would change about the program. The majority of students indicated that they would not like to change anything at all. It is important to note that, contrary to expectations, most students at Project ADVANCE felt that they would not have wanted to have the program period shortened at all. The majority felt that they benefited from the six week period, since it allowed them to achieve their goals and acquire the requisite skills.

In line with the generally very positive responses,
- 90% of the students stated that they would participate in such a program again if they were just starting out.
- 96% of the students stated that they would recommend this project to a friend or relative with learning disabilities.
- 90% of the students stated that they had a better understanding of their learning disabilities than when they started out in this program.

In explaining this improvement, the majority cited their access to a diagnosis and pilot staff explanation of their assessments and of learning disabilities in general.

The majority of the Cambrian summer graduates reported that they planned to enter Cambrian College and study a variety of subjects there, while the Project ADVANCE graduates were planning to enter different universities and community colleges.

- 94% of the York summer students stated that they planned to disclose their learning disabilities at their new location.
- 67% of the Cambrian students planned to disclose their LD, even though they were continuing their studies at Cambrian, where they were already familiar with the staff in providing special needs supports.

- 25% of the summer students stated that they were very confident about handling the disclosure issue;
- Another 61% stated that they were quite confident;
- 13% of the students stated that they were not very confident, and only one student indicated a total lack of confidence.

- 70% of the exiting summer students stated that they had a career goal. This is a decline from the time of the intake questionnaire.
- 20% of the responding students stated that their career or educational goals changed as a result of their participation in the summer project, all Project ADVANCE students.

For the majority of the students their career goal is directly related to the course/subjects that they plan to study (85%). While 93% of the students state that their career choice builds on their areas of strength, only 59% indicate that their career choice helps them to avoid having to function in their areas of most significant weakness caused by their learning disabilities. This discrepancy which is reported by almost all pilot students continues as a cause for concern.

XIV. Conclusion

In conclusion, it is clear that the pilot projects have been providing valued and successful services, supports and accommodations to their pilot students with specific learning disabilities. The students who have participated in these pilot projects during the past four years have reported that they have benefited from the pilots. While they have identified from time to time areas of program delivery and support that required improvement, the students' frequent testimonials, often emphasizing devoted pilot staff, has been most encouraging.

LOTF, the pilot institutions and the post-secondary education sector have all benefited from the input of pilot students and the diligence with which they have participated in the research project. Based on the information provided, preliminary recommendations have already been submitted to the Minister and have been approved for implementation starting in September, 2002. It is LOTF's hope that the 24 recommendations that have arisen from and are supported by the student and institutional data will also be approved and implemented over the next few years. That way, all students with specific learning disabilities within the post-secondary education sector will benefit from the hard work of the pilot students who went before them and the pilot institutions' dedicated hard working staff. This collective endeavour will comprise the LOTF's lasting legacy.

It's about belonging

Learning Opportunities Task Force Report: 1997 to 2002

Appendix B

APPENDIX B

REVIEW AND ANALYSIS OF THE DATA OBTAINED FROM THE INSTITUTIONAL TRACKING QUESTIONNAIRES FOR PILOT ACTIVITY BETWEEN SEPTEMBER 1998 AND JUNE 2002

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I. Introduction

Programme evaluation has been a key part of the Learning Opportunities Task Force's work. This has consisted of gathering and analyzing both qualitative and quantitative information, obtained from a number of sources, namely pilot students, pilot and other staff, faculty and senior administrators of the pilot institutions.

The purpose of all LOTF programme evaluation activities has been to determine whether:

- the pilot institutions had been providing more effective and substantially different, preferably enhanced programmes, services and supports to their students with specific learning disabilities than had been the case prior to the establishment of each pilot project at the host institution;
- the students reported noticeable improvements and individual successes over the period of their participation in the pilot project;
- the students and pilot staff reported individual and institutional progress towards achieving the student success indicators identified by the LOTF in its initial vision statement; and
- the funds spent resulted in meaningful demonstrated change and reflected a realistic per-pilot-student cost for each of the pilots.

The institutional tracking questionnaire, one of the major evaluation tools developed by the Consulting Team, was first used as a part of the progress report submitted by all pilot institutions to the consultants on January 15, 1999, following the September, 1998 start up for most of the pilots. Subsequent questionnaires were collected on June 15, 1999, November 15, 1999, February 15, 2000, June 30, 2000, January 31, 2001, June 30, 2001, January 31, 2002 and June 30, 2002.

The Consulting Team prepared a progress report based on the data obtained from each of these questionnaires and submitted these to the Chairman of the LOTF. Copies were also provided to the members of the LOTF Committee of Reference and a summary was returned to each of the pilot institutions. This enabled them to compare their own responses and demonstrated trends with the consolidated trends and information obtained from all the pilot projects. Also, the annual reports that LOTF submitted to the relevant ministers and ministry staff included a summary of the data and information contained in the institutional tracking data reports.

This report is based on consolidated data obtained from institutional tracking questionnaires #1 to #9, covering the period between September, 1998 and May 31, 2002. At the start, in September 1998, there were eight pilot projects, involving 13 institutions: nine community colleges and four universities. Two of those institutions, the Universities of Guelph and York, did not enrol pilot students until 1999. Therefore, they did not submit institutional tracking questionnaires until the fall of 1999.

The Francophone consortium project involving three Francophone community colleges was discontinued in the summer of 2000, due to the institutions' inability to meet the LOTF diagnostic criteria. This was due to the fact that there were and still are no diagnostic tools in French, normed for a Franco-Ontarian population, which would allow for an acceptable diagnosis of specific learning disabilities within this population. A separate project to address this need was established by LOTF and is reported upon separately in the main report.

During the fall of 2000, throughout 2001 and in the first half of 2002, seven pilot projects continued at ten pilot institutions: four universities and six community colleges. Only one pilot project is continuing into the 2002/03 academic year. This is at the University of Guelph, which will its pilot project offerings into a fifth year. The summer 2002 provision of Project ADVANCE at York University was the fourth such summer institute. Institutional tracking data for the closing elements of these two projects will be received later on and considered by the Consulting Team at that time.

The institutional tracking questionnaire consists of sixteen questions. The pilot responses to these questions provided the Task Force with consistent, primarily statistical information. It allowed for the compiling of data to create totals for the pilots, to develop comparative and aggregate percentages and analyses as well as to enable the consultants to compare individual institutions' activities with the institutional average and the data of other comparable institutions. This, in turn, enabled the consultants to develop recommendations for individual or all pilot projects. These were formative initially and more recently contributed to our summative findings.

In this consolidated report, data are presented in such a way that trends, changes and consistencies from year to year may be observed. In reporting these data, the Consulting Team also looked inconsistencies and patterns that may influence future long term services and supports for students with specific learning disabilities.

The Consulting Team has noted that the tracking and reporting of student numbers and participation rates have served as a very useful accountability tool. As a result, it has been the recommendation of the consultants to Dr. Stephenson, Chairman of the LOTF and to the Hon. Dianne Cunningham, Minister of Training, Colleges and Universities that the programs funded and delivered through the Enhanced Services Fund should also be tracked and reported upon in a similar manner.

II. Student numbers

II.1. Pilot enrolments

In each of the questionnaires, the pilot institutions were asked to report the number of students with whom they have worked during the specified period covered by the questionnaire. These numbers were typically greater than the actual number of participating pilot students, since some of the students, in spite of the initial screening and documentation review carried out by the pilot institutions, did not meet the validation criteria formalized by the LOTF in the third year of its existence, which was the second year of pilot activity.

This did not necessarily mean that non-validated students did not have learning disabilities or some type of identifiable learning problems. However, as is described in detail in the validation section of the main report, the criteria were particularly rigorous to establish carefully support the validity of the research. Students who did not meet the validation criteria, but who did have an identified learning disability or learning problem, were typically referred to the institution's Special Needs Office or Office for Students with Disabilities. That way they had access to some appropriate services and accommodations and the institution met its obligations under the ***Human Rights Code***. At the same time, LOTF could ensure by its carefully constructed definition and assessment parameters that findings, conclusions and the resulting recommendations do indeed address the mandated population and its needs.

- In the first year, 1998/99, the six pilot projects at eleven pilot institutions, reported that they had worked with a total of **435** students.

- In the second year, 1999/00, when there were eight pilot projects at 13 institutions, the total number of students that had some involvement with the pilot projects increased to **709**.

- As mentioned previously, during the 2000/01 academic year, the number of pilot projects was reduced to seven and these were delivered at ten institutions. One pilot project was a consortium involving two universities and two community colleges. In spite of that, the total number of students involved in some pilot project activity increased to **818**. Some of these were students who continued from the previous year(s), while others were new intakes.

- During the 2001/02 year, the number of students involved with the pilot projects was almost the same as the previous year, **811**. Again, some of these were students who continued from the previous year(s), while others were new intakes. It is important to note that with the exception of the University of Guelph and York University's Project ADVANCE for the summer of 2002, the pilot institutions were directed to cut off the intake of new students on December 31, 2001. As a result, the intake period was significantly shorter than in the previous years.

II.2. Pilot exits

Pilot institutions were also asked to report the number of students who left their pilot project, though not necessarily the pilot institution. Some of these students graduated, having completed their courses of study. Some participated in the summer programs at York University and Cambrian College, which were short term projects of six weeks and two weeks (later one week) respectively. Others decided, independently and/or with staff support, that they did not need the intensive level of participation required of pilot students.

One of the most important findings that was made that the drop-out rate among pilot students was significantly lower than the generally reported drop out rate for post-secondary students in general and for students with disabilities in particular. In other words, even though there were students who chose to discontinue their participation in the pilot project, the pilot project components contributed to an enhanced retention rate among pilot students. These findings were confirmed by additional tracking data collected by the pilot institutions and reported to the LOTF in their year end evaluation reports.

The number of students who were reported as having left the pilot project (exited) in each year were as follows:

1998/99	90
1999/00	214
2000/01	201
2001/02	226

II. 3. Validation Status

In each of the institutional tracking reports after the validation process was established, the pilot institutions reported the number of students that were deemed eligible for pilot participation, those deemed ineligible, those whose validation determination was still pending and those who were exempted from the validation process. The total numbers of students reported under these categories by the pilot institutions were as follows:

• Students deemed eligible through the validation process	987
• Students who met the first year participation criteria and were exempted from the formalized validation process, usually because they did not continue in the pilot beyond the first year	138
• Students exempted from validation, since they were only involved in the summer projects	117
Total number of students with SLD included in the database, i.e. validated or exempted	**1,242**
Students who were deemed ineligible through the validation process, i.e. excluded from the data base	302

II.4. Diagnosis and documentation

Given that the pilots' recruitment process included a preview of available documentation, e.g., previous assessments, IPRC identification, IEPs, etc., the consultants noted the number of ineligible students with some concern. In our collective opinion, shared by the pilot institutions, this reflected the unfortunate fact that, in spite of the extensive outreach practices of the pilot institutions in which they regularly and consistently notified school boards of the documentation and assessment requirements for incoming post-secondary students who are to be registered as "students with specific learning disabilities" , many continue to arrive at colleges and universities with inadequate or no documentation. Many have very poor assessments. Some of the students who were identified as having learning disabilities by an IPRC in fact do not. Others who were diagnosed as having learning disabilities by our pilots were never previously identified. This of course also meant that they had received no special education programs or services during their elementary and secondary years. The implications of these findings are serious not only for students with learning disabilities and their families, but also for the school system and for post-secondary education.

We recognize that the validation process imposed a very rigorous requirement in terms of the diagnosis of learning disabilities. However, where a student who has been identified by an IPRC as having a learning disability turns out to have another exceptionality (frequently a mild intellectual disability) or has no identifiable exceptionality, but may be in need of some remedial help, this is clearly a severe systemic problem.

It is also important to note that in each institutional tracking questionnaire the pilots were asked to estimate the percentage of newly enrolled pilot students who arrived during the period covered with inadequate or no documentation of their learning disabilities. While the actual percentages have varied slightly, they typically ranged from a low of 70% to a high of 100%.

The one consistent exception had been the University of Guelph. Guelph has a pre-screening . process in place, whereby students must produce specific documentation confirming a specific learning disability before acceptance into the pilot. In spite of this stringent requirement, the University of Guelph still finds that a significant percentage of their students at first appear with inadequate documentation.

A further important note is that the community colleges typically report a higher percentage of their students with learning disabilities arriving with no or at best inadequate documentation of their disability, compared to the universities. Since the majority of students with learning disabilities within the secondary school system do not proceed to post-secondary education at all, it is likely that an even higher percentage of students who go on to search for work, to a job or to an employment-related training programme, such as an apprenticeship, have no adequate documentation attesting to their learning disabilities. It is inevitable that these students will also have no knowledge or understanding of their learning disabilities and as a consequence will have no self-advocacy skills. The many potential negative consequences of having unidentified and unremediated learning disabilities (unemployment, illiteracy, welfare, mental problems, suicide, involvement in the criminal justice system, etc.) are often the direct result of the lack of diagnosis; the consequent lack of self-awareness and self-advocacy skills; the absence of suitable coping and compensatory strategies and a lack of access to appropriate accommodations which may otherwise help individuals to overcome the impact of their disability.

Thus one of the key findings of the LOTF's research is the significance of appropriate, timely and accurate diagnostic assessments, available to all who have or are suspected of having learning disabilities.

II.5. Student questionnaires

As part of the tracking and evaluation processes implemented by the Task Force, students were invited and encouraged to complete and return three types of questionnaires. No identifying information was requested and the questionnaire collection provided for anonymity. These are as follows:

- the intake questionnaire,

which students complete within the first three months of their pilot participation. Each student is asked to complete one intake questionnaire during their total pilot involvement, even if they transferred from one pilot institution to another.

- the progress questionnaire

which students complete at least three months after returning an intake questionnaire. Students were provided with a progress questionnaire once each year of their pilot involvement. Some who did not complete an intake questionnaire opted to return completed progress questionnaires.

- the exit questionnaire

which students completed, as they leave the pilot project. Where students chose not to return an exit questionnaire, their pilot institution was asked to complete an exit proxy form about the student. The proxy form is a much shorter form of the exit questionnaire. This was developed in year three of the piloting period and as a result, there were a number of students for whom there were no data. exit questionnaires or proxy forms. Some students who did not complete an intake questionnaire and/or progress questionnaire opted to return completed exit questionnaires.

During the period covered by this report, i.e., four years of pilot activity, the institutions reported that a total of **1457 intake questionnaires** were distributed to students, with a return rate of 1245. This is a very respectable **85% rate of return**.

Also for the four year period, the institutions report that there were **1315 progress questionnaires** distributed and 1080 returned to the Task Force. This is an **82% return rate**, which is again quite impressive. These are all students with learning disabilities for whom the reading and completion of forms is often quite problematic. However, these statistics indicate a high level of interest and commitment on the part of pilot students. Assistance from pilot staff with reading and writing accommodations also facilitated the high return rate.

- According to the pilot institutions, a total of **1080 students** were given **exit questionnaires** during the four years. A total of 1008 exit questionnaires and proxies were returned for a return rate of 93%.

This distribution and return rate did not meet the LOTF goal of 100% coverage. However, the return rate achieved is regarded as sufficient, especially when combined with other data sources collected by the pilots and LOTF, to inform our findings. Nevertheless, although we can account for the majority of students, close to one third of the exit information, especially during the fourth year of piloting, was obtained from proxy forms.

II.6. Referrals to the pilots

One question of the tracking form focuses on the numbers of students referred for intake consideration to the pilots and the staff time expended on working with students who were not admitted into the pilot project. There is such diversity in the numbers reported, that it is difficult to draw any meaningful conclusions.

The institutions collectively report that over the four year period, they received a total of 3353 referrals including self-referrals.

In the last three years the institutions were also asked to report the number of referrals that did not proceed beyond the initial inquiry from the student or interview by staff. They reported that out of a total of 2507 referrals during 2000, 2001 and 2002, 927 or 37% did not result in any significant follow up activities or involvements. However, for 63% of the interested students, there was some follow up activity or support offered.

While the amount of time spent by pilot staff on working with all the referred students is quite significant, the fact that in 63% of the cases the referral went beyond an initial inquiry indicates that this time is beneficial. Many of these students, even if they were not directly involved in the pilot project, were referred to the institutions's Special Needs Office of Office for Students wit Disabilities for help. Others were referred to other services, not necessarily related to disability.

The total time that pilot staff collectively report having spent with these students is 8906 hours or (at the rate of seven hours a day) 1272 days. The calculated time per student and per institution is so diverse, that it tells us very little about the efficiency or efficacy of the process. However, it is clear from the feed back received from the pilot institutions that a great deal of this time is either spent on assessments or review of assessments as well as some form of counseling, including academic advising. If more students received better transition programming as they proceed from secondary school to post-secondary education including support related to assessment, understanding their LD and educational and other advising, some though certainly not all of this time could be reallocated to other services and supports.

II.7. Incidence rates

Another question tracks the numbers of non-pilot students at the pilot institutions who are identified as having learning disabilities, both confirmed and not confirmed, in accordance with the Accessibility Fund reports that the post-secondary educational sector is required to submit to the ministry each year. These numbers have been steadily climbing for the past several years, reflecting, perhaps, a greater understanding of the post-secondary opportunities available to students with learning disabilities, and the visibility of the pilot institutions and their services to students with learning disabilities. We also asked for and received updated numbers for total institutional enrolment to enable us to calculate the actual percentage of students with learning disabilities at each institution.

Since many of the students included in these figures continue their studies from year to year, it is not appropriate to provide a cumulative total for the number of students reported as having confirmed or unconfirmed learning disabilities. Nor is it useful to simply total the number of students who participated in the pilots from year to year.

However, a year by year reporting is useful. The institutions reported the following numbers, excluding their pilot students:

Date	# of confirmed LD	# of unconfirmed LD	% of total student enrolment
1998/99 (six pilot projects)	841	265	2.78%
1999/00 (eight pilots)	1155	349	1.77%*
2000/01 (seven pilots)	1352	372	1.96%
2001/02	1644	469	2.35%

*It is important to note, when looking at these numbers, that the two institutions that began their pilot projects in the 1999/00 academic year, the Universities of Guelph and York, are both quite large institutions, compared with most of the other pilot institutions. As a result, their incidence rates for students with learning disabilities are much lower than is the case for smaller institutions. This, in turn, reduces the averaged incidence rate for the group of pilot institutions.

Over the same period, it is interesting to consider what percentage the pilot students represent of the total student enrolment at the pilot institutions. The numbers included in these calculations exclude the students who participated in the summer projects, were exempted from the validation process and moved on to post-secondary education at various institution throughout Ontario.

Date	# of eligible LD pilot students	% of total student enrolment
1998/99	345	0.87%
1999/00	449	0.53%
2000/01	590	0.67%
2001/02	610	0.68%

If we consolidate these two sets of numbers, - all students with learning disabilities attending our pilot institutions - then we may derive incidence rates for students with learning disabilities for the post-secondary pilot institutions. The LOTF Consulting Team suggests that this incidence rate is likely representative of an actual incidence rate for students with learning disabilities within the post-secondary educational sector.

Date	total # of LD students	% of total enrolment
1998/99	1451	3.65%
1999/00	1953	2.30%
2000/01	2314	2.63%
2001/02	2723	3.03%

There are diverse incidence rates reported for students with learning disabilities within the post-secondary education sector. A quick literature search indicates that in reports published in the USA during the past ten years the reported incidence rates for students with learning disabilities in post-secondary education range from a low of 0.2% to a high of 10%. Since the definition of learning disabilities, the types of institutions surveyed, i.e., two year or four year colleges, universities, professional schools, etc., and the response rates are diverse in these publications, it not particularly useful to compare the incidence rates of the pilots with these data.

However, continued gathering of these numbers, as the ESF projects are implemented at all forty-two post-secondary education institutions in Ontario, will lead to a more comprehensive and accurate incidence rate.

III. Student Demographic Data

III.1. Gender distribution

The institutions have reported over the past four years that the gender distribution for pilot students has been fairly consistently at about 47% women and 53% men. While the totals were quite consistent from year to year, there were also some consistent differences between the pilot institutions. As the ESF programs begin implementation across the Province, LOTF anticipates additional information about multiple equity issues and their impact on post-secondary students with learning disabilities.

Burt even at the most extreme range, where men outnumbered women by 3:1, the distribution was nowhere near as extreme as that reported within the educational system. From the Ministry of Education's consolidated special education data, based on the school boards' October reports, the percentage of students with learning disabilities who are deemed ISA eligible under the current funding formula plus the data obtained from the Demonstration Schools, would suggest that male students with learning disabilities outnumber their female counterparts by a ratio of about 8:1. However, the distribution within the pilot institutions is fully consistent with the results of several studies published about the participation of students with specific learning disabilities in the post-secondary educational sector.

Other information relevant to gender distribution is available in the LOTF reports on student questionnaire data (Appendix A).

III.2. Course load

Of the total number of students included in this report over the four year period, 86% were reported as full time students and 14% as part time. At the same time, 28% of the participating students were reported as carrying a reduced course load.

Research and student experience indicate that a reduced course load can be very helpful to students with learning disabilities who need to spend a great deal of extra time mastering appropriate assistive technology and learning strategies and applying these to their studies. However, it is also often reported that carrying a reduced course load can be particularly problematic for those students, who, as a result, end up spending one or more extra years at college or university and thus carry a greater debt load than is the average for students within the post-secondary sector.

III.3. Other demographic information

Institutions reported over the four year period that approximately 21% of their pilot students were identified as having additional disabilities. This figure has been remarkably consistent from year to year. The most commonly cited co-morbid condition has been Attention Deficit Hyperactivity Disorder.

Only 2.4% of the total pilot student population were identified by the pilot institutions as having ESL needs. It is important to note that this percentage is not at all typical of the Province of Ontario. However, it is important to note that most of the pilot institutions are fairly small in size and are not located in major urban centres with large immigrant populations. Among the pilot institutions, York University has been the only one with an ESL incidence rate of over 10%, reflecting its location in the Greater Toronto Area. There is further discussion of this particular demographic issue in the student data report and the main report.

III.4. Categories of learning disabilities

A separate tracking question focuses on the type of LD (often more than one) that the students have. The pilot institutions were invited to use the same descriptions of these categories as the students were provided with in their questionnaires. The value of such categorization is two-fold. It helps the students to clarify their strengths and needs in terms of learning environment and approach. This categorization of learning disabilities also helps them to link the difficulties that they face to the type of psychological information processing variance, rather than strictly academic or school based skill deficits. This approach makes their understanding of their particular learning disabilities transferable to work and lifestyle environments. Secondly, considerable work has been done on linking the type of learning disabilities to the type of accommodations and assistive technology that the students find most useful in their studies.

On the basis of the responses over four years from the pilot institutions, the categories are distributed as follows:

Type of LD	1998/99	1999/00	2000/01	2001/02
visual	21%	37%	29%	34%
auditory/ language	37%	69%	64%	68%
motor	12%	14%	8%	11%
organizational	24%	21%	19%	24%
conceptual	16%	15%	14%	15%
non-verbal	6%	10%	5%	6%
math	11%	25%	20%	21%
other	37%	1%	1%	6%
don't know	6%	1%	1%	0%

During the first year of piloting, several institutions had major difficulties with this type of categorization. The high incidence of "other" in that year reflected the approach at some of the institutions where their focus was on the students' academic difficulties, e.g., reading, writing, spelling, etc., rather than the processing approach represented by the list above.

As the piloting process went on, more and more of the pilot institutions were able to utilize this form of categorization of LD. Throughout the four years, the consultants noted with concern the continued low incidence rates reported for organizational, conceptual and non-verbal learning disabilities, compared with the rates reported by the students themselves and reported in the research literature. In general, adults with learning disabilities frequently report organizational and conceptual learning disabilities as well as problems with the skills of executive function: planning, monitoring, organization and metacognition, as the greatest barriers to their occupational and life success. It is also consistently reported that approximately 20% of those who have learning disabilities have their most significant problems in the non-verbal areas (e.g., non-verbal communication and social interaction). The reported incidence of non-verbal learning disabilities among the pilot student population was consistently much lower than that. It is difficult to determine whether students with non-verbal learning disabilities are less likely to go on to post-secondary education than their peers with language based difficulties, whether they are less likely to seek out learning disability-specific services in the post-secondary sector, since they typically do not have the more obvious reading and writing problems or whether the programme offerings of the pilot institutions did not attract or meet the needs of students with non-verbal learning disabilities.

The service and program implications of specific types of learning disabilities may be better understood from further applied research in the future.

III.5. Funding issues

Responses to funding questions on the institutional tracking questionnaire consistently indicated over the past four years that only a relatively low percentage of the pilot students were eligible for OSAP, applied for it or applied for the BSWD/OSBP.

This reflected a number of diverse factors:

- many of the pilot students came to post-secondary education directly or almost directly from secondary school. As a result, many of them were deemed ineligible for OSAP, especially if they continued to live at home.
- students such as those at York University's pilot component for mature students were ineligible for OSAP, since many of them were part-time students, typically had part or full time jobs and in many cases supported a family in addition to studying. Such students are disadvantaged by the current structure of OSAP. The recently introduced changes to OSAP eligibility which allow the inclusion of disability specific costs as one of the qualifying factors do not benefit these students, since many of them did not find out that their former and ongoing academic difficulties were due to the presence of a learning disability until they began to explore the options available from the pilot project.

We are aware that some pilot students were forced to withdraw from their studies due to financial circumstances. We also recognize that many poorer students do not feel that they can afford to enroll in post-secondary education while many others are frightened by the prospects of assuming a large debt load, prior to graduation.

The institutions stated that on an average, one third of the pilot students were eligible for and had actually applied for OSAP. The percentage of pilot students who successfully applied for and utilized the BSWD and/or the OSBP was even lower.

Over the past four years the LOTF had repeatedly voiced its concerns about the level of discrimination that so many students with learning disabilities face in trying to prove their eligibility for OSAP and thereby for the BSWD. In response to LOTF's preliminary recommendations related to OSAP eligibility, the criteria have been eased somewhat and this should help at least some students. However, the evidence from the pilots strongly identifies that the only equitable way of addressing this issue is through the total decoupling of the BSWD from OSAP eligibility as well as amending provincial practices regarding assessments for BSWD eligibility.

IV. Program Components and Utilization Rates

IV.1. Assessments

The tracking questionnaire asked about the number of assessments carried out by the pilot institutions. This question is directly linked to our enquiries about the percentage of students who arrived at college or university with no or inadequate documentation and diagnostic information about their learning disabilities.

Over the past four years, the pilot institutions carried out or purchased 1395 full psycho-educational assessments for their students, as well as conducting and updating 362 additional partial assessments. While the actual numbers of assessments conducted by each institution have varied significantly one from another as have the number of students served, it is important to note that the need to carry out full psycho-educational diagnostic assessments has continued for four years. There is apparently considerable resistance by secondary schools in the pilot catchment areas to respond with alacrity to the pilots' education and outreach efforts extended in this regard.

If students in the secondary panel, as part of their transition for exit process had their assessments reviewed and, where needed, updated, then most of these assessments would not have been required in the post-secondary panel. Nor would the students have been forced to wait, sometimes for months, before the assessment could be carried out, a factor with often damaging academic consequences.

IV.2. Self-awareness and self-advocacy skills

The institutional tracking from consistently posed a question about the students' understanding of their learning disabilities, their ability to explain their LD and their self-advocacy skills. This question compares quite closely with a question on the student intake questionnaire, although the students have five choices ranging from very good to very poor, whereas the institutions have a range of three choices: very good, OK or mixed and very poor.

Students' noted skill levels according to pilot staff	1998/99	1999/00	2000/01	2001/02
strong understanding of their LD	31%	52%	42%	48%
OK or mixed level of understanding of their LD	26%	40%	49%	42%
very poor understanding of their LD	36%	8%	8%	8%
strong ability to explain their LD	22%	44%	49%	42%
OK or mixed ability to explain their LD	31%	43%	39%	44%
very poor ability to explain their LD	39%	12%	12%	13%

strong self-advocacy skills	45%	52%	46%	52%
OK or mixed level self-advocacy skills	28%	29%	45%	37%
very poor self-advocacy skills	19%	18%	10%	10%

Following some significant changes after the first year, when a great deal of program clarification occurred in most pilot projects, the bimodal distribution of reported rates in these questions has been fairly consistent throughout the remaining three years. In spite of the fact that all pilots included in their program components self-advocacy training, including training in the understanding their own learning disabilities and LD issues in general, the pilot staff estimated progress, regrettably, was not quite as good as hoped.

It is disappointing, though perhaps predictable, for the pilots, their students and the LOTF that approximately 10% of the students still have a very poor understanding of their learning disabilities, have poor to very poor skills in explaining their learning disabilities and as a result are seen to have very poor self-advocacy skills.

Further research is required into improving these outcomes for students with learning disabilities in the secondary and post-secondary sectors. This may be one of the many tasks projected for the LOTF successor agency.

IV. 3. Accommodations

Each institutional tracking questionnaire listed the various accommodations that students may utilize during their post-secondary education. This list matches one included in the student intake questionnaire. There are two parts to the question. First, the institutions were asked to state the number of pilot students who used each accommodation. In the second column they were asked to state whether these same accommodations were also available to non-pilot students with learning disabilities in their institutions who were registered with disability services.

Of the listed accommodations, **extra time** has continued to be the most commonly recommended and reported accommodation.

The percentage of pilot students who were reported as potentially benefitting from and utilizing extra time has been in the 80 to 85% range throughout the four years. However, the approach to recommending and utilizing the extra time has changed over the same four years at the pilot institutions, due to involvement of LOTF.

The issue of extra time and how much extra time is made available has been and continues to be controversial. The original research, both in terms of faculty questionnaires and faculty focus groups, indicated that many faculty see the granting of extra time as an automatic and often sloppy response on the part of special needs offices and their staff. The request for extra time, when accompanied with an explanation of why the individual student needs the additional time and with a description of what other accommodations have been or are provided, is much better received by many teaching faculty members.

There is no question that especially when writing examinations or tests, students with learning disabilities will function in certain areas and carry out certain tasks more slowly than their non-LD peers. But sometimes the utilization of assistive technology and alternative formats may reduce the total dependence on extra time. The benefit of this for the student will be that once in the workplace the individual will be able to advocate for and receive accommodations which are more directly linked to their specific needs, while ensuring greater independence.

Extra time often helps with eliminating the stress of having to function in a timed atmosphere, as is typical when writing an examination. However, for students who find writing exams extremely stressful, stress management may be a useful adjunct to the extra time provision. The former can have significant long term benefits, which extra time will not guarantee in the future.

Therefore, all pilot institutions were asked to review and offer an explanation and clarification of how they determine and manage the requests for extra time. The way this is managed at the pilot institutions is quite diverse. However, responses to this question indicated that we have successfully encouraged pilot staff think about the importance of closer individualized tracking and work with the students to reduce their previous almost exclusive reliance on extra time for most if not all situations. Further, most of the pilot institutions have ensured that faculty have a better understanding of the benefits of extra time as well as other accommodations for students with learning disabilities. It would be premature to suggest that, as a result, all faculty concerns have been eliminated, but there is no doubt that some of their major concerns have been somewhat ameliorated. This should provide guidance in the future to ESF projects as well.

It is important to note the results obtained by the students and staff of one pilot project (PATH pilot project at York University) on a standardized reading test (the Nelson-Denny). Forty one students wrote the Nelson Denny test. On the timed version they obtained a score of 8.1 grade equivalent for reading comprehension and 11.7 on the vocabulary score. A grade equivalent score of 8.1 would deem these students functionally illiterate. When they repeated the test, using the untimed version of the same test, their reading comprehension increased to 14.9 and their vocabulary score to 14.0, i.e. appropriate post-secondary literacy levels. Given that all of these students are doing well in their university programs, denying them the extra time for onerous reading tasks would be quite inappropriate and discriminatory.

Over the past four years the other most utilized accommodations have varied somewhat. However, learning strategy tutoring and access to assistive devices have emerged as the most valued accommodations by most pilot students.

According to institutional tracking, the range of most widely used accommodations have been as follows:

In 1998/99	**Utilized by participating students**
- separate rooms for exams	60%
- subject specific tutoring	56%
- learning strategy tutoring	54%
- access to a study partner	42%
In 1999/00	
- learning strategy tutoring	73%
- separate room for exams	61%
- access to assistive devices	60%
- note taking help	46%
- subject specific tutoring	42%
In 2000/01	
- learning strategy tutoring	68%
- access to assistive devices	59%
- separate room for exams	54%
- note taking help	51%
- subject specific tutoring	47%
In 2001/02	
- learning strategy tutoring	81%
- access to assistive devices	74%
- separate room and/or arrangements for exams	61%
- note taking help	53%
- subject specific tutoring	59%

The majority of the accommodations listed for most of the pilot institutions have also been available to non-pilot students, although the depth and breadth of instruction and utilization has often been quite different. Some accommodations are an integral part of the work related to the introduction and implementation of universal instructional design (UID) practices in the post-secondary educational sector. These benefit many students, not just those who have learning disabilities.

IV.4. Program utilization

At first eight and then the subsequently seven pilot projects had provided to their participating students a range of project components. While all were clearly focused on meeting the needs of students with specific learning disabilities enrolled at their institution, what they provided and in what format varied one from another, in accordance with their original proposals and sometimes subsequently modified on the basis of student and LOTF feed back. For example, although all pilots provided self-awareness and self-advocacy training, the way this was done ranged from credit courses about learning disabilities to counseling to small peer mentoring groups. This diversity was one of the strengths of the piloting approach, providing LOTF with a rich span of information about useful practices.

After the first year, the Consulting team had some concerns about the lack of consistency and the low utilization of some project components at some of the institutions, as reported in the tracking questionnaires. The pilot components listed and the numbers of students who were reported as using these during 1998/99 was inconsistent and not supported by the information gathered by the consultants during the site visits or from student questionnaires. Uneven and in some cases very low participation rates for some components raised questions about whether pilot services could and were differentiated form non-pilot provisions to students with LD.

As a result, all pilot institutions were asked to develop a definition of "pilot student" in terms of the minimum student commitment to appropriate utilization of programme components and their observed participation levels. In addition, over the four years, some pilot project components were eliminated at some pilots, while others have been changed on the basis of student input.

Once differentiated student commitment requirements were formulated at each pilot and program components were stabilized, it became possible to collect data about utilization rates for the final three years.

program components	**1999/00**	**2000/01**	**2001/02**
assessments	281	329	288
self-awareness and self-advocacy training	301	410	431
computer support and assistive technologies	317	430	373
learning and metacognitive strategies training	296	399	391
specialized LD related academic credit courses	102	147	70
individual counseling	292	382	344
transition programming for exit	187	209	217
specialized communication supports*	13	16	16
summer orientation to pilot**	57	28	37
transition for entry to post-secondary	201	206	149
individual advising, goal setting etc.	143	313	284
academic and other accommodations	341	453	441
peer mentoring and tutoring	179	205	156
general education college success course with LD specific components	41	54	71

social skills training	52	61	34
peer and self-help support group	63	140	12
writing centre***	15	0	0
supported learning groups***	11	0	0

* The "specialized communication supports" component has been an integral part of the Transition to College for Students with LD program at Cambrian College. Every student in this program has participated in this.
** "Summer orientation to pilot" does not include the two summer pilot projects, the orientation program at Cambrian College and Project ADVANCE at York University, since these stand alone programs rather than integral program components of a pilot project..
***These two components were discontinued after the second year, due to very limited student interest and participation levels.

Students vary in their strengths and needs and therefore in their programming requirements. However, the above numbers indicate that students tend to value and participate in program components that provide them with:

- greater levels of self awareness and an understanding of their learning disabilities (assessment, self-awareness and self-advocacy training and individual counseling); and
- their educational success and achievement (assistive technology, accommodations, individual advising and planning, and metacognitive and learning strategy training).

On the other hand, they do not appear to value and utilize components that they do not see as directly benefitting their educational achievement, e.g., social skills training, college success courses and self-help support groups. The consultants also noted with concern the very limited participation in the exit transition program components, which were available but not well utilized at most of the pilot institutions.

This does not mean that these components are not or cannot be beneficial to the students, but rather that participating students did not recognize the benefit and most chose not to participate at least while pursuing and supporting their academic programs of study.

LOTF's primary focus was direct services to pilot students. As a result, this report does not describe the many important indirect activities undertaken by the pilot institutions. LOTF was aware of and acknowledges the value of these other productive and creative activities such as faculty professional development, student services supports and accommodations, community outreach, presentations and sharing of information and resources with their colleagues in the non-pilot institutions.

V. Conclusion

In conclusion, the information obtained from the analysis of these tracking questionnaires has been a very important part of the LOTF's program evaluation and data gathering tasks. Initially the pilot institutions found it difficult to keep track of all of this information and to report regularly and consistently to the LOTF. However, by the second year, they recognized the importance of such data collection for both credibility and accountability purposes and co-operated fully with LOTF expectations. A consolidated report based on the data obtained in each institutional tracking report was prepared for the Chairman of LOTF and shared with the members of the Committee of Reference. A summary was returned to the pilot institutions to give them the opportunity to compare their individual data with the collective data for all pilots.

All recommendations that the Task Force is offering to the Government of Ontario are based on solid and clearly tracked data, such as those gathered from the institutional tracking questionnaires as well as all the student questionnaires, site visits and focus groups.

As has been stated in several places in this report, LOTF's research and the pilots' diligent reporting over the past four years have identified the need for further ongoing research activities and the tracking and analysis of data collected about the post-secondary experiences of students with learning disabilities. It is anticipated that the LOTF successor entity and the ESF projects collectively will take this initiative forward.

It's about belonging

Learning Opportunities Task Force Report: 1997 to 2002

Appendix C

APPENDIX C

COMPILATION OF THE PILOT INSTITUTIONS' FINAL SUMMATIVE REPORT EXECUTIVE SUMMARIES

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Introduction

Following four years of pilot activity, each pilot institution was required to prepare a summative report describing its activities, key findings and recommendations.

In this appendix to the final report, LOTF has reproduced the executive summaries of these final reports to give readers an opportunity to hear from the pilot institutions, in their own words, the most important issues that they addressed and about their successful outcomes.

The tables of contents of the final reports are included in the LOTF technical report. Copies of the final reports may be obtained by contacting the staff of the pilot institutions. A listing of the ten pilot institutions, comprising seven pilot projects, appears below, together with their key staff contact. A full listing of all pilot staff appears in the technical report.

Listing of the ten pilot institutions with their key contact staff member:

- Cambrian College, Sudbury: Susan Alcorn Mackay;
- Conestoga College, Kitchener-Waterloo: Marian Mainland;
- Fanshawe College, London: Frank Walsh;
- Georgian College in Barrie, Orillia and Owen Sound: Kate Beatty and Jim Bryson;
- University of Guelph: Bruno Mancini;
- York University, Toronto: Cora Dusk and Marc Wilchesky;
- Trent University, Peterborough: Eunice Lund-Lucas;
- Loyalist College, Belleville: Catherine O'Rourke
- Nipissing University, North Bay: Dan Pletzer;
- Canadore College, North Bay: Dawson Pratt.

EXPANDING HORIZONS FOR ADULTS WITH LEARNING DISABILITIES IN A COLLEGE SETTING at CAMBRIAN COLLEGE

Report Prepared by: Susan Alcorn MacKay, Project Manager
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The overarching pilot project ***Expanding Horizons*** was comprised of two programs to meet the needs of two distinctive student populations of adults with learning disabilities transitioning to post secondary education: *Orientation* and *Transition to College.*

Orientation is a "head start" program developed for students with self-identified learning disabilities entering college in the fall to commence post-secondary studies at Cambrian College. *Orientation* evolved from a two- to one-week program offered in late August to support these incoming students in their acclimatization to college, familiarization with the staff and services of the centre for disability services, and adaptation to the demands of the adult learning environment.

Orientation is viewed as a form of programming to enhance student retention in a high-risk population as new students with learning disabilities make the transition to the college environment. Findings from our two evaluative research studies on student retention provided some encouraging support for the provision of an *Orientation* program for this group of high-risk students.

Cambrian College recognizes the value of this kind of programming for students with learning disabilities and the important role it plays in facilitating students' transition to post-secondary studies. Now that our funded piloting years have come to a sunset, Cambrian College has committed its ongoing support to continue *Orientation,* making it a mainstay in the diverse menu of services offered by The Glenn Crombie Centre for disability services. Cambrian College will continue to offer this program free of charge, contributing free early residence to incoming students who have registered in residence for the semester.

In addition to continued programming within Cambrian College, this pilot activity also generated the portable legacy document *Orientation to Post Secondary Education: Program Development Guide* with a companion CD of adaptable (editable) instructional resources to support program transferability to interested post-secondary institutions.

Transition to College for Students with Learning Disabilities is a 32-week adult training program offering adapted academic remediation and intervention to adults with verified learning disabilities who are unprepared or unqualified for admission to a post-secondary program. The

Transition to College certificate program (TCPG) is a full course load with adult training and post secondary credits running two semesters in the academic year. Both academic and holistic components have been structured into the program for students to achieve the expected outcomes they will need to be qualified and prepared for post secondary enrolment.

Academic skill deficits in mathematics and communications are addressed on a platform of computer and assistive technology, learning strategies instruction, understanding of learning disabilities and self-awareness of learning strengths and challenges, to allow for enhanced academic growth. As an adapted program for adults with complex and multiple learning disabilities, TCPG provides an integrated, holistic learning environment as students move toward their substantive academic objectives. While preparing and qualifying for post-secondary admission, students make a supported, progressive transition into the post-secondary environment by taking two post-secondary credit courses in their final semester. Program developers feel that all of delivery components work in tandem. They need to be customized to the complex learner profile of strengths, weaknesses, attitudes and disposition to learning, motivation and goal orientation. Program developers emphasize that program components cannot be exported in 'chunks' as educators must recognize the integrity of TCPG as a holistic program.

Evaluative research of *Transition to College* was conducted each year of pilot delivery using a number of standardized tests at intake and program end. These evaluative activities served to shape the development of this program, and provided measures of the program's impact and effectiveness in relation to the expected outcomes and goals of this program. Evaluation relied on both statistical and testimonial data from students from a number of sources.

Intake data on students' learning disabilities, motivation and psychological and social adjustment were key in developing individualized program interventions, especially in the first semester.

Program effect was determined by comparing post-program Woodcock-Johnson test results of students' achievement in reading, mathematics and writing with the students' test results at intake. Program effect on student achievement was determined by comparing the results from two post-program testing conditions: with and without technology accommodations. The research findings showed significant effects in academic achievement outcomes. With and without accommodations in the post-test situation, students in the third and fourth year of the program demonstrated significant improvements in academic skills. The data affirmed program developers' impression that a direct teaching methodology, metacognitive strategies, technology and a supportive learning environment interconnect with individual learner profiles and students' understanding of their learning needs to promote success in academic performance among students with complex and multiple learning disabilities.

The **legacy** of the pilot *Transition to College* includes a continuation of TCPG as an adult training program for students with learning disabilities as a fully supported MTCU funded program. As well, a formalized program description including course outlines, sample lesson plans, delivery considerations, best teaching practices, and job descriptions have been compiled in a number of legacy documents for sharing with interested program developers in other post-secondary institutions.

Institutional and Community Outreach education to the professional and client community, as well as to faculty and staff, to improve the level of understanding and service to persons with learning disabilities were extensive during the pilot years of LOTF funding. In addition to providing in-service faculty training and enhanced print materials, an annual two-day community *Pathways* conference, and workshops to over 400 B.Ed. students enrolled in the Faculty of Education at Nipissing University, the Glenn Crombie Centre is currently partnered in a special two-year project with the two local school boards to deliver assistive technology training to secondary school teachers and students with disabilities.

In both the community and in the College, our professional reputation for training and education in the field of learning disabilities reflects our cumulative knowledge and accrued expertise—capacities that were developed as a direct result of LOTF professional development opportunities and pilot activities. Dissemination of this professional knowledge through extensive outreach education in our institutional, service and client communities also constitutes an enduring legacy from our pilot activities.

The collected expertise of our pilot staff is also culminated in our current delivery of **training in Learning Strategies and Assistive Technology** to post-secondary personnel in the field of learning disabilities. After conducting a significant province-wide needs assessment, an initial offering of three on-line courses towards certification was delivered to over 50 learners from Ontario's colleges and universities. Preliminary evaluation of these courses indicated a high level of participant satisfaction in the delivery and content of these courses.

Pilot conclusions indicate the team's appreciation for having had the opportunity to participate in this significant provincial initiative by the Learning Opportunities Task Force over the past four years.

LEARNING OPPORTUNITIES PROGRAM

at CONESTOGA COLLEGE

Report prepared by: Marian Mainland, Coordinator

Jason Newberry, Program Evaluation Consultant

This report describes the programming activities and summative evaluation results from the four years of the Learning Opportunities Project (LOP) at Conestoga College. The main body of the report is divided into two parts: (A) the "Program Component Summaries" prepared by individual LOP staff and (B) the "Summative Outcome and Component Program Evaluation" prepared by the Program Evaluation Consultant.

The following points are highlights from the evaluation portion of the report:

Community awareness

The Transition Counsellor has raised community awareness of LOP, especially among high school educators and guidance counsellors. The LOP program is highly regarded in the community.

Student transitions to College

The **PASS** summer transition program:

-increased knowledge of LOP and College services, intent to use them, and awareness of how to access them;

-increased knowledge of appropriate accommodations and comfort level in accessing them;

-increased knowledge of student's own learning disability and effective study strategies to help compensate for learning difficulties.

Adaptive Technology Support:

Qualitative feedback and student ratings of the ATS component indicated that the computer lab has helped students learn about and use adaptive technology software and that this has helped them overcome certain deficits associated with their learning disabilities.

Employment Transitions:

Students who took the "Employment Perspectives" course reported having more employment knowledge (as it relates to learning disabilities) than did students who did not take the course. An interaction approached significance, suggesting that in-course students gained more knowledge over time than non-course students.

Job competence, a self-concept measure was related to the acquisition of key employment knowledge.

In-course students displayed increases in "vocational identity" (an indicator of workplace readiness) while non-course students did not.

Workplace readiness may be alternatively defined as having specific knowledge about how one's learning disability (and learning disabilities in general) impacts employment, along with other relevant information about learning disabilities and employment. Given this definition, project students displayed increases in "workplace readiness."

In-course students achieved greater gains in confidence in self-advocating with employers than did non-course students.

Qualitative feedback demonstrated that, while in-course students increased confidence in self-advocating, many did not wish to disclose their learning disabilities to employers.

Self-awareness and knowledge of study strategies:

Students enrolled in the "LD Strategies" credit course made significant gains in general knowledge and self-knowledge of learning disabilities, knowledge of study strategies and self-advocacy; these students were higher in the knowledge acquired in these domains than non-course students.

Learning Strategies Training (LST) users experienced gains (though non-significant) in the above knowledge domains and in key LST outcomes, such as understanding one's own learning strengths and weaknesses and their impact on school work, knowledge of when and why to use certain strategies, and attitudes towards the use of study strategies (i.e. belief in benefits)

Self-concept:

Increased knowledge of one's own learning disability and knowledge of study strategies was related to high self-concept in a number of domains, including global self-worth, intellectual ability, and scholastic competence.

Self-advocacy:

After completion of the LD Strategies credit course, the acquisition of key knowledge was related to confidence in self-advocating. This pattern was not seen for non-course students measured during the same time periods.

In-course students (LD Strategies course) made significant gains in confidence in self-advocating over time and were significantly higher than non-course students at post-test. Confidence in self-advocating was related to success in the "mock self-advocacy" assignment in the course.

The majority of students expressed positive attitudes towards self-advocating and expressed self-confidence in doing so.

Positive interactions with professors when self-advocating were the norm while negative experiences were the exception.

Greater academic success through programming:

Increases in confidence in self-advocating were associated with higher grades.

Overall, high knowledge of study strategies was significantly related to grades. The cumulative average of students who reported high knowledge of study strategies was 7% higher than students who reported low knowledge. Further, high strategy users were significantly higher than non-Project LD students and comparable to non-LD matches.

When reporting high knowledge and use of study strategies, Project students who experienced high learning difficulties in many learning domains achieved academic success on par with other students. Students who experienced high learning difficulties, but did *not* use study strategies, performed poorly in comparison.

Learning Strategy Training outcomes at post-test were significantly related to higher grades.

Greater accommodation use was related to lower grades and lower knowledge of study strategies. LOP programming, by increasing knowledge and use of study strategies, increased grades while decreasing dependence on accommodation.

In conclusion, the **Learning Opportunities Project (LOP)** at Conestoga College provided students with learning disabilities with enhanced support services that had a direct positive impact on their success at College. LOTF and the Ministry has acknowledged the value of two of our LOP components, the learning strategies training and adaptive technology training, and these initiatives will continue through the *Enhanced Services Funding*. As part of the LOP legacy, Conestoga College has committed to picking up the financial support for the clerical support person (who is now largely responsible for processing BSWD requests, maintaining the student data base and evaluation information, and providing back-up to the Test Proctoring Administrator. The College has also agreed to pick up the funding for the Employment Transition Advisor so that, for the first time, we will be able to provide workplace transition support for all students with disabilities. The College has also agreed to maintain the office space renovated for LOP staff and the Adaptive Technology Resource Lab as well as continually upgrading the technology in the Lab.

We will continue to seek out financial support for other services, identified through our evaluation as being essential to student success. We are hoping that some of these services, such as the secondary school transition and LD Strategies course, can continue through the LD Summer Institute project scheduled for implementation in the summer of 2003.

We thank the Learning Opportunities Task Force,; the Ministry of Training, Colleges, and Universities; and Conestoga College for their support of this successful initiative.

MILLENNIUM PROJECT

at FANSHAWE COLLEGE

Report prepared by: Frank Walsh with the support of the Millennium Centre staff

The Millennium Project at Fanshawe College was one of eight pilot projects at Ontario colleges and universities funded through the Learning Opportunities Task Force between 1998 and 2002. Nearly 300 students with documented learning disabilities made use of the various components of the Millennium Project and two thirds of these provided detailed information about their background, academic experiences, progress at college and plans for the future.

The Millennium Centre staff provided supports related to LD counselling and assessment, peer tutoring and mentoring, individual strategies instruction, access to assistive technology, individual English and communications studies, and assistance with the transitions into college and to the workforce. Twelve full time staff members provided these services over the four years of the pilot and evaluation data were collected through a variety of formats.

Students who participated in the pilot research all had documented learning disabilities and were validated as having met specific criteria for this diagnosis, consistent with guidelines followed by psychologists and educational specialists in North America. Students had a long history of academic difficulty supported by special education services and entered the college setting with little confidence in their chances for success. Weak skills in fundamental academic areas of reading, written language, and mathematics presented a significant challenge for the pilot students who were enrolled in a wide variety of programs at Fanshawe College. The majority of pilot students experienced additional challenges including financial, emotional, social or related physical concerns.

The goals of the Millennium Project were to increase the academic success of students with learning disabilities; to increase graduation and employment rates; to improve the success rate in English and communications courses which had been a traditional barrier to many students; to increase the knowledge and skill of College faculty and other staff in meeting the needs of students with learning disabilities; and to improve the ability of service area staff to assist students with learning disabilities in using admission, registration and financial aid services.

Data collected through the Millennium Project indicates that the pilot project was highly successful in achieving these goals. Students participating in the pilot components consistently reported that they benefited from these supports and considered their academic success to be related in part to the availability of enhanced services.

Various measures of academic success, including comparisons of retention rates, percentage of attempted courses passed and grade point averages of pilot students and matched comparison groups, support these findings. Pilot participants experienced a higher level of academic success than did students with learning disabilities prior to the Project as well as a comparison group of students using standard disability services while the pilot was underway.

The graduation rate and employment rate six months beyond graduation were comparable between pilot students with learning disabilities and their non-disabled peers. When students were asked to formally evaluate the benefit they received from each of 30 distinct pilot project services, the 104 respondents to the individual survey endorsed all as "useful" to "extremely useful" in helping them compensate for their learning disabilities. There were a number of components that emerged as particularly beneficial to students with learning disabilities when their evaluative ratings were compared with forced choices of the five supports they considered most critical.

These included the accommodation of extra time on exams, one-to-one tutoring, 24-hour access to an assistive technology lab, personal counselling, help with the purchase and use of assistive technology, access to special equipment and software, help assessing individual strengths and needs through evaluations, participation in an individual communications course and help in getting complete lecture notes through a variety of methods.

Many students made note through evaluations of the benefits of the general atmosphere in the Millennium Centre and the supportive, positive and encouraging attitudes displayed by staff. The general impression of most students was that, while individual components of the pilot project were all of benefit to them, it was the whole experience of participating in the Millennium Project that contributed to their success. The interaction and collaborative approach of pilot staff contributed to this impression of the whole being greater than the sum of its component parts.

While evaluative data suggest that the Millennium Project was highly successful in achieving its stated goals for the majority of post secondary students, pilot experiences suggest that alternative service delivery methods may be necessary to effectively meet the needs of some. These include students who find it difficult for a variety of reasons to access the traditional model of visiting a service centre such as the Millennium Centre to talk about problems, which then leads to possible solutions. Preliminary findings of an alternative model for helping students with learning disabilities in apprenticeship and technology programs led to encouraging results.

Activities of the Millennium Project also contributed to a much greater awareness among faculty, support staff and administrators of the College about the needs of students with learning disabilities and the services that benefit them. Some systemic changes took place during the life of the Millennium Project, which should have longer-term implications for students at Fanshawe College.

The summative evaluation results for the Millennium Project, which are described in greater detail through the following report, will be shared with the Learning Opportunities Task Force. These results, combined with those of other pilot projects, will contribute to practical recommendations to the Ministry of Training, Colleges and Universities and hopefully improve the opportunities for students with learning disabilities at all post-secondary settings in Ontario.

CENTRE FOR ACCESS AND LEARNING DISABILITY SERVICES (C4A) at GEORGIAN COLLEGE

Report prepared by: Jim Bryson, Co-ordinator, with the support of the C4A staff

Georgian College's original proposal was submitted in March 1998 as "Bridges to Opportunities". The Centre for Access and Learning Disability Services (C4A) was established as that "bridge" with sites on Barrie, Orillia, and Owen Sound campuses. Developed from an integrated full service model, the Centre provided access and outreach, advocacy and learning support, adaptive technology and work transition services to applicants, students and the community. All services were available at the three sites. The principles, identified in the original proposal, were supported throughout the project including: working with students, faculty, and staff using a systems perspective, developing solutions from an integrated holistic perspective, building on individual strengths, supporting students to take control, assisting students to learn about learning, and providing services in diverse ways to maximize learning potential and readiness to learn.

In the original proposal, ten goals were established and through the four years were the focus for the staff in the Centre for Access and Learning Disability Services. These goals were reviewed.

> **To create a Centre for Access and Learning Disability Services that will enable individuals with learning disabilities to engage fully in an active learning community.**

The three sites provided services to 669 applicants and 269 pilot students who studied at one of our three campuses. In the last year of the pilot, there were more than 4,500 contacts between Centre for Access staff and pilot students. Despite their academic workloads, three C4A students held positions in student government; one was the President of Barrie's Student Administrative Council for two years, one was the Vice president of SAC and one C4A student was the student representative on the College's Board of Governors for one year.

The C4A was included in several College promotional tools including the Calendar since 1999, the Preview Book since 1999, the Graduate Placement Report for 1999 and 2000, from 1998 to the current Student Planner, and a web pages linked to the College's. In addition, the Centre was featured in many information pieces in the College Capsule, and the Georgian Eye.

> **To enhance community collaboration through the Community Advisory Board which will be supportive to students, families, educators, researchers and professionals working for individuals who have learning disabilities.**

In the first two years, we attempted to develop a Community Advisory Board with very little success. After the second year, C4A staff including the Coordinator, the Research Analyst and Outreach Consultant assisted the three Simcoe County Learning Disabilities Associations to collaborate and form a single organization.

Over the past four years, three official openings and eight community events were held at the College campuses. In addition, two national conferences were offered through the Centre of Access and other sponsors such as the LOTF.

To provide a modified admission process for entry to the college and identify seats in our open programs for individuals who have learning disabilities.

An individualized admissions procedure was developed with the Registrar's Office. The Centre staff recognized that students with learning disabilities needed the academic requirements to be successful in programs in which they were accepted. Consequently, the designated seats were not pursued. Efforts were made to support students in College upgrading who had learning disabilities to ensure that they were successful in building their skills for entry to post secondary programs.

To ensure functional assessments are identified, as tools needed to assist those who have learning disabilities.

Over four years, the C4A provided 349 psycho-educational assessments at the three campuses. The assessments were a key to ensuring the students had a good understanding of their specific learning disability. The process of giving back the information to the student was an important part of the service delivery. More than 120 students participated in formal self-advocacy training that gave them the tools to understand their assessments so that they could be used to identify their strengths and areas of weaknesses. Information about their learning disabilities assisted many students to make significant progress in creating solutions for themselves.

To provide support services especially in first year that assist students in academic programs as well as later in the workplace experience.

During the pilot, we expanded our orientation process and offered PROCEED for the past three years. Almost every pilot student had instructional accommodations and many pilot students reported that our test accommodations were most effective in supporting their success. Learning strategies were provided to 187 students. More than 80 students enrolled in the Success at College General Education course which built academic skills that helped pilot students to handle their other course work. A second General Education course, Career Success, was offered to pilot students in a small class format. More than 55 pilot students were involved in "formal" social skills training although many more received this support through individual counselling. Peer Services were used by more than 40% of the pilot students.

To develop a program that will assist individuals who wish to prepare for college or university.

In the summer of 2000, Surfing @Georgian was offered to 10 high school students in the second week of August. In 2001 summer, the program was offered again, but due to low registrations, C4A did not deliver the program. It appeared that high school students bound for college did not want to take time in the summer to prepare for College. In our outreach efforts from the second year on, we informed our catchment high schools about Project Advance offered at York University.

To create links to employers, develop opportunities for students and graduates with learning disabilities; as well as identify trends in the labour market. (revised from proposal)

There was limited success in achieving this goal. The Work Transitions Consultant spent more time working with individual students for co-op, field and other work placements than with employers. During the four years, the Centre staff has met several times with co-op consultants developing a referral and work relationship. In addition, there have been relatively few graduates from Georgian who have needed workplace support. This is due to the fact that many of our students take at least three years and often more to complete programs. The four years of the project was insufficient to collect data on the workplace support required of graduating pilot students and consequently, this is recommended as an area of applied research.

To support the Centre with leading edge technology and systems to ensure quality services are provided.

The C4A surpassed this goal after hiring a well-qualified adaptive technologist in the second year of the pilot. An adaptive lab was established at each site and adaptive assessments as well as training were major emphases of these labs. More than 50% of pilot students used the adaptive technology services. Although each lab had specialized equipment, in the past 18 months more C4A students used the Special Needs Bursary funds to purchase their own equipment after being assessed for adaptive technology and trained in the adaptive lab.

Several sessions were hosted for the Boards of Education to support them in using the technology in the high schools. In the past year, a contract Adaptive Technologist was hired to assist with the workload. This is another area that C4A will pursue applied research activities.

To increase understanding of the college community about learning disabilities including classroom strategies, student services, and workplace accommodations through research. (revised from proposal)

Destination Success and the Tapestry of Teaching were used to highlight research findings to encourage access and success in the classroom. The Universal Instructional Design project, with the LOTF and other post secondary institutions, has built better understanding of improving systemically through teaching and learning processes. The C4A developed a proposal on adaptive technology for the Ontario Innovation Trust with the College's Research and Evaluation Centre and it is recommended that these activities continue in the coming year.

To provide professional development opportunities for adult learners, teachers and families, to create a better understanding of how learning disabilities may impact on individuals and their working and learning experiences.

Team members engaged in professional development activities from the pilot's beginning. The C4A staff participated in: the Learning Disabilities Institute in June, 1998, 1999 and 2000; attending "Closing the Gap" on adaptive technology in October, 1998, 2000 and 2001, Job Development workshops for individuals with disabilities in 1999, 2000 and 2001, the National Peer Conference, Pathways Conference in 2000 and 2001. The Centre hosted several staff and community sessions with Allyson Harrison in November 1998, Eva Nichols in April 1999, Paul Gerber in May 1999, and Mark Wilchesky in October 2001. Destination Success 2001 and 2002 and the Tapestry of teaching are conferences the C4A organized to ensure professional development.

The Centre supported academic advising training in the first two years in order to build faculty's understanding of learning disabilities and the new C4A. During 2000-2001, three Learning Innovation Facilitators were seconded to the C4A. They surveyed faculty about specific classroom concerns, assisted faculty to understand how to assist students with LD in the classroom, created the Centre for Access website, prepared a course entitled Brain Rocket, and implemented communications and math support centres to provide immediate assistance to all students including those with learning disabilities. Universal instructional design was identified as a key issue and a research project was undertaken with the LOTF in 2001. From this project, the C4A recommended Georgian incorporate the development of an accessible learning community into the College's strategic plan.

"A journey of thousand miles begins with a single step" was on the front page of the first brochure that we created for the Centre for Access. As we end the pilot, we traveled many miles on the journey and yet the path's end is not in sight and seems hidden just beyond the next bend. While on the journey, we faced many junctures, which led to choices of one road over another. These decision points included space, campus locations, the staffing of services, delivery systems, research, strategic directions, legacy and sustainability. With these decisions, our vision of the 1998 goals continues to steer the Centre's future. The Centre for Access and Learning Disability Services has a vital presence in our college community and is woven into the Georgian fabric, which will contribute to its sustainability. The C4A staff worked very hard to make a difference for the students with learning disabilities. Their commitment to students worked to ensure creative solutions to the many issues that the students and faculty have faced in the delivery of C4A services to ensure student success. As a result in 2002, Georgian's student leaders (SACs) approved a motion for a $75 fee each semester for one year, 2002-2003. This fee will continue the C4A services and programs until March 31, 2003. The Ministry will receive the final report from the LOTF in the fall of 2002. The SACs endorsed the recommendation that the C4A become a regional center to continue the initiatives that support students and faculty and provide a network of collaboration to other educational institutions and develop applied research projects.

Dr. Stephenson's leadership to the C4A has been inspiring. Her passion and commitment to issues related to learning disabilities has enabled us to galvanize strong leadership from our senior management. The LOTF and especially Eva Nichols have provided Georgian with a great deal of support, guidance, direction and problem solving over the past four years. The C4A's positive impact on Georgian is very much related to her generous sharing of expertise and knowledge. In addition, the LOTF has provided several key opportunities to network and learn from the other pilots which contributed significantly to our success. The C4A has developed into a dynamic hub of professional services for individuals with learning disabilities.

PROJECT ADVANCE

at YORK UNIVERSITY

Report prepared by: Maureen Haig, Co-ordinator

Marc Wilchesky, Director, LDP

A. Key Summative Findings

Project ADVANCE was a 6-week summer institute whose primary aim was to prepare students with specific learning disabilities for success in their university studies. The program operated over four consecutive summers, beginning in July 1999. In total, eighty-five students participated in the pilot project.

The curriculum of Project ADVANCE included: metacognitive strategies; self-advocacy training; reading, writing, notetaking and mathematics strategies; study and life skills training; assistive technologies; and the awareness of available campus support. In addition, students had the opportunity to clarify their individual areas of academic strength and weakness as they related to the challenges of university studies. The primary goal of Project ADVANCE was to provide a solid foundation in academic, study and life skills required for post-secondary study. At the same time, the program sought to provide social and emotional support to a group of students who due to the nature of their specific learning disabilities could have been at greater risk of not completing their post-secondary education.

Immediate quantifiable changes are difficult to assess in an intensive six- week program. The types of skills and changes that a program like Project ADVANCE attempts to influence are those which generally take time to practice and develop prior to there being any observable significant improvement. For example, improving general reading comprehension is a long-term goal that can begin through introductory teaching of active reading strategies. However, in order to achieve an overall higher skill level in reading comprehension - particularly for students with learning disabilities - significantly more individual and long-term practice would be required than a six-week program realistically can provide.

Despite the foregoing caveat, there were significant quantifiable changes during each year of the project. The specific study skills that showed improvement varied somewhat depending on the group of students participating each summer, however there were some consistent findings. Students reported that they had improved their skills with respect to their general use of study aids as academic tools. Other academic skills which were noted in various years as significantly improving included: information processing skills, selecting main ideas from text, spelling, time management, test-taking strategies, self-testing, attention and motivation.

Perhaps even more important than the quantifiable changes noted above, student participants in Project ADVANCE consistently reported anecdotally that their involvement in the program tended to be their first opportunity to gain a better understanding of their learning disability.

This sense of self-understanding together with the learning and study strategies that students acquired, would seem logically to contribute to overall positive outcomes in terms of student retention in the post-secondary programs of their choice. According to our available data, all of the eighty-five students who participated in Project ADVANCE have continued their pursuit of post-secondary education.

Student "graduates" of Project ADVANCE have returned enthusiastically year after year to participate in a student panel to discuss their experiences as university and college students. They consistently have told new Project ADVANCE students that their experience in the summer institute was critical to their successful transition to post-secondary education. Responses to student questionnaires, focus group data, and unsolicited comments from student participants during the four summers of Project ADVANCE strongly suggest that students felt that the experience served to increase both their skills and confidence to pursue post-secondary education.

B. Summative Observations and Recommendations

Over the course of the four years of implementation of Project ADVANCE, we have used a variety of staffing models. We have found that the actual number of instructors was not always a predictor of success. Rather, the most important variable appeared to be whether instructors were full or part time staff. Full time instructors seemed to be able to get a clearer sense of the needs of their students. A staffing ratio of one instructor:four students appeared to be optimal, particularly when the Coordinator needed to meet intensively with the students to discuss individual psychoeducational profiles and self-advocacy issues.

A six-week program seemed to provide enough time for students to begin to think about how their academic skills might require support and how to start developing them. The nature of the program allowed students to focus on skill development without the additional pressure of obtaining grades. The staff - and some of the students - felt that the participants could have benefited from a longer program, but they also acknowledged the practicalities associated with this. The length and timing of the program might be prohibitive to some students who need some time in the summer to earn money in order to pursue their post-secondary education. In order to maintain the intensive focus of the course along with the continuity that a six-week program can provide, it might be feasible to examine a four-week course that could be offered twice during the summer. This might increase the number of students that could participate and might remove some barriers associated with the six-week program. However, the reduction in time may result in significantly less opportunity for "over-learning" that often is so necessary for students with learning disabilities.

As much as the summer program tried to replicate the academic demands of post-secondary education, the curriculum might be more focused to allow more time to practice those skills that take longer to develop. The math component, though definitely necessary for some students, is very difficult to develop so that it suits the needs of students with a wide range of abilities in this subject area. This is a subject area which could be addressed more particularly with students who definitely are going to need support in this area, but perhaps would be more effective during the academic year just prior to their needing the support.

Assistive technology training during the program was a major success. In order to be effective, students needed to be able to receive immediate feedback for difficulties they were encountering which required that all staff be available during lab work. As well, the most effective form of instruction was one-to-one. Students had very different needs and paces of learning and required their own work station so that they could learn and develop at their own pace.

Based on our overall observations, Project ADVANCE seemed to be highly valued by virtually all participants over the four years of its existence. We believe strongly that this type of program serves an important function in easing the transition from high school to post-secondary education for students with learning disabilities and increases the probability for their success. We hope that funding will be available to ensure continuation of this program.

MATURE STUDENT PATH PROGRAM
at YORK UNIVERSITY

Report prepared by: Diane Addie, Co-ordinator

Pam Smith, Counsellor

Contributors: Scott Pope, Director, Counselling and Supervision Centre

Fran Clark, Counsellor

Puja Chopra, Work/Study Assistant

Key Findings

Program Growth: Over the course of the four-year pilot, the number of students involved grew from 8 to 64, an increase of 700%. Just over one-third of the program's overall growth occurred in its final six months, from June to December 2001.

Gender of Participants: Females outnumbered males at a rate of two to one. In the older age groups (35+), the proportion of females to males increased to three to one.

Age of PATH Student: Seventy-five percent of students were over 25 years of age, with over half (53%), over the age of thirty. Eighty-six percent of students left high school more than five years ago.

Employment Status: Fifty-six percent of PATH participants were employed.

History of Diagnosis:

- Students in the 20-24 range were more likely to have received supports prior to entering university. In the older age groups, the percentage of students who did not receive supports outnumbered those who did.
- Eighty percent of students entered the program with no documentation. A further 17% required additional testing to verify program eligibility. In total, 97% of the students required a psychological assessment. No one in the 40+ age group came to the Centre with documentation or a diagnosis.

OSAP and BSWD Eligibility: The majority (66%) of students enrolled in the program were not eligible for OSAP. Only in the 20-24 age range did the OSAP eligible students outnumber those who were ineligible. This created a high demand for assessments by the Centre's assessment team, as the students did not have the funding for an outside assessment.

Skill Level: Students' reading comprehension levels, when timed, were equivalent to a late grade 8 level. When time restraints were removed, they rose to grade 15.4. Vocabulary increases, while less dramatic, increased students' performances from the high school (grade 12.7) level under timed conditions, to university (grade 14.3) level when time constraints were removed. This provided clear evidence of the importance of extended time and alternate formats for examinations.

PATH Students Requiring Support with Writing Skills: Eighty-eight percent of students in the program required support to write at the university level.

Impact of the Program: Of the students (37.5%) who had taken courses prior to entering the PATH program, 86 % showed an average GPA increase of one point or grade level -- from 4.6 (C) to 5.8 (C+) .

EXECUTIVE SUMMARY

Observations/Recommendations

The challenges at the Atkinson LDP are tied to the age of our clients.

Access to Services: Given that seventy-five percent of Atkinson program participants are over 25 years of age, many are balancing work, home and school. Therefore, on campus services must be available outside traditional hours. Additionally however, there is a need to consider services that are not as dependent on the student's on-campus presence. In future, these may include such non-traditional vehicles as:

- Web Sites
- Chat Boards
- On-Line Tutoring

Such services would also promote a greater sense of community among students who are generally on campus only for evening classes, once or twice a week.

Bursary Availability: As the majority of students enrolled in the program were not eligible for OSAP, they were also ineligible for the BSWD. For the many who could not afford such costs themselves, they were unable to access:

- Content-specific tutoring or
- Technical support, such as computer hardware and software.

Additionally, the lack of access to bursary funding means that most assessments are completed by the PATH program staff. As 80% of our clients arrive with no documentation, and a further 17% require partial assessments, finding a satisfactory solution to the provision of timely assessments remains difficult.

Program Evaluation Activities

In addition to the LOTF questionnaires completed by program members, the following activities were undertaken at Atkinson LDP.

Objective Measures and Findings

GPA: For students and program staff alike, the most significant measure of the program's impact involved tracking of student grade point averages (GPA) prior to and after receiving support. Of those students who had taken courses prior to entering the program, 85.7% showed improvement after registering and receiving supports. On average, their GPA increased by one point, representing one grade level.

Workshops: Despite consistent interest in specialized skill-building workshops, even the most successful offerings were attended by only a handful of students. As a result, all program participants were surveyed to identify which workshop topics, days and times would be most beneficial to them. In discussion with the students, the special needs of our mature student population became evident. They did not have time to attend the workshops, overwhelmed as they were by their work, home and school obligations.

On-Line Services: Given that only a small number of our students are able to physically attend workshops, a focus group was held to discuss the perceived benefits and challenges of on-line tutoring and information sharing. While funding for such an endeavour will present difficulties, the overwhelming majority of students expressed interest in this vehicle as a means of addressing their time issues.

Subjective Measures and Findings

As counselling, advocacy and support are among the most highly utilised PATH student services, staff at the Atkinson LDP had opportunity to obtain individual, informal feedback on various program components. In addition to counselling and advocacy, students placed particular value on the provision of extra time on exams, a separate room in which to write, use of a computer with spellcheck during exams, note takers, tutoring, assistive devices, writing assistance and bursary funding. While adaptive technology was highly valued, its use by older students was sometimes limited. This was due, at least in part, to time constraints -- but otherwise to the students' lack of comfort with technology.

LEARNING OPPORTUNITIES PROGRAM

at the UNIVERSITY OF GUELPH

Report prepared by: Bruno Mancini, Director, with the support of LOP staff

The Learning Opportunities Program of the University of Guelph has consisted of three separate cohorts of students entering in 1999, 2000 and 2001. In total 116 students with validated assessments participated in the program. More than 200 students applied to the program over the three years. Students were asked to participate in three mandatory programs - START, Orientation, and L.D. Course for Credit. In addition, LOP students had access to other programs including Career Education, Adaptive Technology and L.D. advising and support through the Centre for Students with Disabilities. An important aspect of the program was an initiative to increase faculty awareness of L.D. issues and enhance the way courses are delivered by faculty.

Utilizing a comprehensive and rigorous evaluation design, all program components were evaluated over the three years and key outcome indicators were tracked.

All Program components were evaluated highly by students with the L.D. Course for Credit being identified as a new, exciting initiative that would provide great benefit at relatively minimal cost. In terms of program outcomes there were significant changes for LOP students in terms of decreased anxiety levels, increased ability to self-advocate, greater use of learning and compensating strategies and improvement in areas of self worth. The LOP had a positive impact on the university community. Faculty reported greater awareness of L.D. issues as a result of the project and creative ways of reaching faculty were identified. In terms of course enhancement the university is committed to the Universal Instructional Design Project.

In terms of academics, LOP students did as well as other LD students and the regular student population. However, students who were admitted below the admission cut offs did not perform as well academically.

The Learning Opportunities Program provided some valuable insights into providing services for students with learning disabilities. The need for accurate, up-to-date assessments is crucial as is the need to provide balanced support and accommodations for students. Adaptive Technology support and career education are ongoing needs for L.D. students. The L.D. Course for Credit is a positive initiative and needs to be continued.

In terms of legacy, the University of Guelph with the support of enhanced funding by the Ministry is committed to maintain all key programs and services of the Learning Opportunities Program.

In summary, we are pleased to have been involved with such a project. As an institution developed in terms of our services to L.D. students and because of LOP our commitment to supporting students with disabilities is stronger.

VIRTUAL CENTRE FOR EXCELLENCE IN LEARNING DISABILITIES INTEGRATION

at Canadore and Loyalist Colleges, Nipissing and Trent Universities

Report prepared by: Eunice Lund-Lucas, Trent University, Project Manager - Virtual Centre LOTF pilot project

Contributors: Dawson Pratt, Project Leader – Canadore College

Catherine O'Rourke, Project Leader – Loyalist College

Dan Pletzer, Project Leader - Nipissing University

Executive summary

During the four years of their involvement in the Virtual Centre pilot project, the four post-secondary institutions taking part have achieved a number of common outcomes as a result of pilot activity. Among these are:

- Better screening procedures for the existence of learning disabilities among students at participating institutions
- Improved diagnostic assessment procedures for assessing the existence and type of specific learning disability
- Development of formal academic support programs for students with specific learning disabilities
- Training of professional staff working with students with learning disabilities who can assist the student in gaining a better self-knowledge in the area of their own learning and the nature of their learning disability as well as its impact on their daily lives
- Providing access to adaptive technology for learning and instruction in its use to students with specific learning disabilities
- A significant number of successful students with learning disabilities progressing through their chosen programs of study towards graduation and work in their chosen field
- Through the collaborative efforts of consortium staff and students at each institution, awareness of the learning needs and strengths of students with specific learning disabilities has been raised to the point where faculty now consider these staff and students as partners in the learning environment.

The past four years have shown, through the success of the students who entered this project, that with the appropriate level of support, students with specific learning disabilities who are appropriately diagnosed can enter post-secondary education and successfully achieve their academic goals. At each point along the road to success, which this project has had at our respective institutions, the students were treated and felt like partners in determining what supports would be put into place and in evaluating how effective those supports were for furthering their individual goals. This feeling of 'belonging' to a team effort was one of the prevalent themes throughout this project and, during their exit interviews, the current pilot students conveyed to pilot staff that this aspect of the project was critical to their success. The theme of 'belonging' to a bigger entity was also important to the staff of this project. Periodic sharing of information and expertise through team meetings and staff retreats served to better support the team members in their daily work with and on behalf of the pilot students. As a result, each student benefited from the collective experience and expertise of the entire consortium team. This helped make the students successful. Through team meetings and team activities, students shared common concerns and experience so that they became aware that they were not alone in having to deal with and overcome learning barriers. Through such interaction, these students have improved their self-understanding and self-knowledge as a result of pilot involvement. They are reporting to pilot staff that they now feel more successful as students and as people. They report that they have a better grasp on their learning processes and feel better prepared to move forward with their academic and career goals as result of the pilot supports.

At the outset of this project, the consortium partners developed a set of component- based success indicators (Appendix I). Now, as the project ends, this summary report will illustrate the ways in which these indicators were met.

Reference: Trent University Site Visit Report #5.

Primary Theme...

With proper diagnostic assessment information as the basis for working with students with learning disabilities, these students can be empowered to succeed within appropriate academic settings and beyond through use of the following intervention and/or accommodation measures:

- Early access to transition support
- Appropriate accommodations linked to the student's specific learning needs
- Work with technology which can utilize the students' strengths to assist in compensating for their weaknesses- i.e. geared to the specific learning profile
- Access to trained and understanding staff who help the student develop coping strategies for all aspects of their learning needs from the academic through the social-emotional

Our pilot students have, over four years, gained a level of self-knowledge and self-understanding, which makes them successful and will continue to contribute to their success as they move forward in life. These successful students are the number one outcome of the past four years of the pilot and we, the staff and institutions involved in this project, salute them!!!

104-01209/

It's about belonging

Learning Opportunities Task Force Report: 1997 to 2002

Report Summary

**Ministry of Training,
Colleges and Universities**

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Ontario

November 20, 2002

The Honourable Dianne Cunningham, Minister
Ministry of Training, Colleges and Universities

Dear Minister,

On behalf of the entire team of the Learning Opportunities Task Force, the staff and students of each Pilot Project, the small committed group of consulting professionals, the very qualified members of the Committee of Reference, and our capable administrative staff of three, I am pleased to present our final report - the culmination of five years of dedication to a project which is unique in the world.

I am deeply grateful to have been granted this rare opportunity to serve Ontario students with Learning Disabilities and look forward, with eager anticipation, to the establishment of the successor structure which will implement the recommendations which embed the achievements of the Task Force firmly within the educational experience of Learning Disabled students in this Province.

Thank you for your continuing interest and support.

Yours sincerely,

Bette M Stephenson

Dr. Bette M. Stephenson, Chairman
Learning Opportunities Task Force

It's About Belonging

LOTF would like to thank Spencer J. Harrison, a successful student with LD from Trent University and the pilot project staff at Trent for allowing us to use Mr. Harrison's painting, which appears on the cover of the report.

In describing his painting, Mr. Harrison wrote the following:

"One of the most important components of any special needs department is the sense of belonging that it creates or restores for the student. Being diagnosed as an LD student isolated me from the greater community of students. Once I got involved with the Special Needs Department and accessed the tools I needed to work with my learning disabilities, I no longer felt isolated. In fact, I was now a member of two communities, the supportive special needs community and the competitive greater student body.

It's About Belonging is a painting which illustrates these feelings for me. The boat in the extreme foreground of the painting was intended to be a metaphorical rendering of me, or any other LD student , before they join the Special Needs community, represented by the boats in the background. The boat in the foreground could also be read as the LD student, having gained the necessary tools, now a little more enlightened, excelling ahead of the others. In either case, the boat in the foreground is a little different in shape and reflection from the others, but strong, bright and beautiful."

On May 6, 1997, the Hon. Ernie Eves, then Treasurer and now Premier of Ontario, made the following statement, as part of his budget speech:

"Too few students with learning disabilities get the help that they need to make the transition to college or university. To help these students realize their potential, we will establish pilot projects at the college and university level, to provide real help to learning disabled students in a meaningful way."

The **Learning Opportunities Task Force** (LOTF), under the leadership of Dr. Bette Stephenson, a former Minister of Education, is the mechanism through which these pilot projects have been established, with a clear mandate:

1. to improve the transition of students with specific learning disabilities from secondary school to post-secondary education, and

2. to enhance the services and supports that students with learning disabilities receive within the post-secondary educational sector, such that they can complete their education successfully.

After a period of preliminary research and review, the LOTF invited proposals from every community college and university in Ontario. The institutions were not given directions for the program and project components that the Task Force would fund. Instead, they were told to propose projects that would address the LOTF's mandate. All were informed that to be eligible for participation in the newly created pilot projects, pilot students must satisfy the following diagnostic/definitional criteria for learning disabilities:

- learning disabilities are neurologically based information processing deficits;
- they occur in individuals with average to above average intelligence;
- they typically cause a discrepancy between the individual's potential and achievement, although they should not be diagnosed purely on the basis of such a discrepancy;
- they are a life-long condition, manageable with appropriate supports and direction;
- they must be diagnosed by a registered psychologist or an appropriately qualified professional, using a battery of tests.

The proposals were reviewed by the LOTF consultants as well as an external committee of experts in the field, the Task Force's Committee of Reference. (A list of these individuals may be found at the end of this document.) The thirty-five proposals received from the forty-seven potentially eligible post-secondary educational institutions were reviewed in a "blind" format, i.e. with all information identifying the institutions and their locations deleted from review copies. On the basis of a second round of review and consultations, LOTF established eight pilot projects in thirteen post-secondary educational institutions. These were:

- **Expanding Horizons: Transition to College for Students with Learning Disabilities** and a summer orientation program at Cambrian College in Sudbury;
- **Learning Opportunities Program** at Conestoga College in Kitchener-Waterloo;
- **Millennium Centre** at Fanshawe College in London;

- **Centre for Access and Learning Disability Services** at Georgian College in Barrie, Orillia and Owen Sound;
- **Learning Opportunities Program** at the University of Guelph;
- **Project ADVANCE** summer orientation institute and mature student **PATH** program at York University in Toronto;
- **Virtual Centre of Excellence for Learning Disability Integration**, English consortium: Trent University in Peterborough, Loyalist College in Belleville, Nipissing University and Canadore College in North Bay;
- **Reussir ses Etudes Collegial - Troubles d'Apprentissage**, French consortium: College Boreal in Sudbury, La Cite Collegiale in Ottawa, College des Grands Lacs in Toronto and its environs.

Students first entered most of the pilot projects in September, 1998. After two years it became clear that the French language project, delivered at three French language community colleges, was not meeting its mandate, due primarily to the lack of adequate French Language assessment tools for the diagnosis of specific learning disabilities. As a result this pilot was discontinued. To address the problems identified by the Francophone project, the Task Force has since embarked on the development, standardization and norming of a French language diagnostic battery of tests for the assessment of learning disabilities among Franco-Ontarians. This is the French Language Assessment Project.

The remaining seven projects, involving six community colleges and four universities located throughout Ontario, continued their work into 2002. One pilot, located at the University of Guelph, is completing its mandate during the current academic year and will provide its final report to LOTF in the summer of 2003.

During the past four years **1242 students** who met the LOTF's very rigorous participation criteria received pilot services and participated in the pilot projects' evaluation. This made the LOTF project the largest research endeavour of its kind in the learning disabilities field, unique both in its depth of enquiry and the selection process of participants. The pilot projects were diverse in their content, specific program offerings, locations and languages of instruction. However, in order to achieve baseline consistency for their evaluation measures, all assessed student achievement using LOTF's student success indicators, which are contained in the LOTF vision statement.

The development of the LOTF vision statement began with the premise that students with specific learning disabilities are able to succeed in post-secondary education, provided they have access to certain key components which allow them to reach their potential and achieve their goals. To determine what these key components are, the Consulting Team began by examining the needs of students with learning disabilities. Once these needs, institutional service provisions and other available information were analyzed, it was feasible to determine the success indicators for students with learning disabilities in the post-secondary sector. These indicators were first articulated as:

- entry into an academic programme of the student's choice, provided that the student meets standard entrance requirements;

- successfully meeting the essential requirements of the programme, although the manner in which the student demonstrates mastery may be altered by academic accommodations, programme modifications or the use of coping and compensatory strategies, but with no change to standards or outcomes;
- graduation from the student's chosen program and institution;
- possession of the requisite skills to pass any licensing requirements, with appropriate accommodations, if needed, related to the field of study or career which he or she has chosen;
- being employment ready;
- being sufficiently job ready so that he or she can advocate for any job accommodations that may be required in order to obtain and maintain employment.

The initial LOTF vision statement also addressed ideal institutional and systemic provisions. In total, the vision statement provided LOTF with a set of comprehensive goals for achieving its mandate. Parts of this statement have required adjustment as a result of intensive applied research. Despite modifications, however, the essence of the original statement, including the student success indicators, has been confirmed.

All pilot institutions determined student eligibility for participation through the rigorous diagnostic validation criteria introduced by the Task Force in the second year of piloting. A summary description of this process is included in the final LOTF report. The complete validation document may be found in the accompanying technical report.

The Task Force closely tracked and evaluated the activities and outcomes of the pilot projects, with the students themselves providing much of the research data. The LOTF database contains information from more **3000 student questionnaires** received over the past four years. These consist of responses to LOTF's intake, progress and exit questionnaires. In addition, each of the pilot institutions completed nine institutional tracking questionnaires over the four year period. These objectivist measures were supplemented by comprehensive program evaluations conducted by the pilots, and by regular site visits by LOTF's consultants to all pilot projects

The accountability measures implemented by the LOTF have already resulted in some notable, positive systemic changes within the post-secondary education sector. Ontario's colleges and universities and the services and supports that they provide to their students with specific learning disabilities will never be the same as they were before the establishment of LOTF. However, despite encouraging changes and trends within the post-secondary sector, there is still much to be done to improve the transition process for students with specific learning disabilities as they leave the secondary system for post-secondary education or employment. Consequently, the work of the LOTF and the pilots is continuing in some areas, including the enhancement of workplace transition activities from the post-secondary sector.

Based on analysis of the data provided by the students and by the pilot institutions, the LOTF arrived at seven key findings. These key findings generated twenty-four recommendations that the LOTF now presents to the Government of Ontario.

The final report which the LOTF is submitting to the Government includes, in addition to the key findings and recommendations, the details of the criteria and the processes that the LOTF used to select and establish the pilot projects, to define criteria for student participation, to evaluate the results and gather and interpret the information and data provided by the students and the pilots.

It contains information about continuing research activities and projects which are supported through the LOTF and about the common legacies of the pilot projects. Finally it contains a series of appendices with consolidated data and the analyses of the data obtained from the students and the pilot institutions.

In addition to the final report, LOTF has compiled a detailed technical report, which includes a description of research methodology, copies of the questionnaires used, information about the evaluation processes and other relevant technical information.

This summary of the final report includes the LOTF's key findings and recommendations. Each finding is accompanied by a series of supporting data statements, obtained primarily from the student questionnaires and occasionally from the pilot institutions' tracking questionnaires. The twenty-four recommendations that flow from their respective key findings and the supportive data lead to comments and clarification of the recommendation's intent. There are no detailed implementation plans included at this stage. These will be developed for all approved recommendations by the LOTF successor agency.

LOTF, the pilot institutions and many dedicated and talented students collectively rose to the challenge that was presented in 1997. Staff at the pilot projects provided outstanding supports, services and programming to the pilot students. The students participated and assisted with the evaluation tasks of the LOTF at an unprecedented rate. There is no doubt that the students felt well supported and expressed their appreciation of the opportunities available to them. They were also generous, lively and forthright in articulating their recommendations for institutional and systemic changes.

LOTF, in turn, greatly valued the formative and conclusive recommendations provided by the students and pilot staff. We note that the direct perspectives of the pilot students were granted particular "privilege" as the key findings and recommendations were formulated. We also commend the extent to which the pilot projects and their staffs sustained primary focus on student voice and experience. The LOTF is convinced that implementation of the twenty-four recommendations will lead to the anticipated and desired outcome that students with specific learning disabilities will be enabled to make the transition to post-secondary education, should they wish to do so, when they receive those supports, services and accommodations which enable them to realize their full potential.

Now that we know what students with learning disabilities require to succeed and what is necessary to ensure that their goals are successfully attained at a reasonable cost, can we afford to do anything less?

LOTF'S KEY FINDINGS AND RECOMMENDATIONS

KEY FINDING I RELATED TO STUDENT SUCCESS

Students with learning disabilities (LD) are as able to succeed in post-secondary education as their non-disabled peers, provided that:

A) their academic and social experiences during the elementary and secondary school years appropriately address the individual needs of students with learning disabilities;

B) their transition to post-secondary education is appropriately facilitated;

C) the necessary individualized supports, services, programs and/or accommodations are available to them during their post-secondary years and they choose to use them.

Supporting data

- *95% of responding (those who completed and returned questionnaires to the LOTF) students stated that the pilot project contributed significantly to their academic success*
- *53% of students have been receiving As and Bs in their courses and only 7% have marks below a C*
- *18% of students stated that they were doing very well, 26% doing well and 30% doing reasonably well in their studies while only 1% indicated that they were doing so poorly that they were thinking of dropping out of school*
- *87% of the students stated that they were passing all required courses for their program*
- *38% of the students who completed exit questionnaires were graduating; 26% had completed their current course but were not yet leaving the institution; 21% planned to stay on and continue their studies in spite of pilot closure; only 5% of exiting students stated that they were actually dropping out of post-secondary education. (This figure is much lower than the drop out rate reported for the post-secondary student population in general and for students with learning disabilities in particular.)*
- *97% of students stated that they would participate in such a program again.*

Therefore, LOTF recommends that:

1. **The results of the work of the LOTF and the pilot institutions be distributed to all secondary schools and post-secondary education institutions throughout Ontario.**

This information package should include the LOTF's key findings and recommendations; the Government's response to these; data demonstrating that students with learning disabilities are as able to succeed in post-secondary education as their non-disabled peers; and identification of successful programs, project components and available resources. LOTF's research results indicate the need for systemic change throughout the education system, including but not limited to full implementation of and compliance with relevant legislation such as the ***Ontario Human Rights Code***, the ***Education Act*** and its regulations and the ***Ontarians with Disabilities Act*** (ODA).

2. **School boards consistently be held accountable for compliance with Regulation 181/98 under the *Education Act*, which mandates the development of transition programming and planning for all students with disabilities who are 14 years of age or older.**

Almost none of the pilot students had the benefit of mandated transition planning. Transition plans developed for students with specific learning disabilities must be in accordance with the Ministry of Education's Individual Education Plan Standards document. Schools and school boards must ensure that these students are made aware of the option of proceeding to post-secondary education and are actively helped to pursue such goals.

3. **Proven transition programming should be available to all students with learning disabilities who are going on to post-secondary education and are interested in participating in such opportunities.**

Participants consistently lauded the program offerings of Project ADVANCE, the summer orientation institute offered at York University. These students came from all parts of the Province and proceeded to a wide range of universities and colleges for their post-secondary studies. Many of them commented favourably, over the past four years, on the ongoing value and academic benefit of Project ADVANCE. Many also expressed the wish that such transition programming had been available to them earlier during the last years of their secondary school experience. In response, LOTF is funding seven additional pilot summer programs for 2003. Evaluation of these will provide future direction for achieving the recommendation's objective.

4. **All post-secondary educational institutions introduce and implement a full range of LD-specific service and program options appropriate to the needs and identified disabilities of each individual student.**

It is imperative that these programs and services be delivered at all institutions by knowledgeable, caring and supportive disability services staff with expertise in learning disabilities. Students should be involved in the development and evaluation of these services, so that the provisions appropriately reflect student voice and experience, as was the case for the LOTF pilots.

5. **Incentives be made available to all post-secondary educational institutions to promote collaboration with secondary schools and other public sector organizations and agencies within their communities to offer intensive outreach and post-secondary orientation to adolescents and adults with identified or suspected learning disabilities.**

Extension to community-based organizations and adults who are no longer in school is particularly important for individuals with learning disabilities who have been barred from college or university entry because of lack of adequate educational supports and transition planning in the past. In many cases, adults have not had access to assessments. As a result, it is often suspected but not yet confirmed that their difficulties are due to specific learning disabilities.

KEY FINDING II RELATED TO ACCESS TO DIAGNOSTIC ASSESSMENTS

A significant majority of the students arrived at the pilot institutions with no, or at best inadequate, diagnostic information. As a result, students had neither appropriate documentation nor an understanding of their own learning disabilities. A comprehensive, up-to-date diagnostic assessment is essential for the provision of requisite supports, services, programs and accommodations for students with learning disabilities. Almost all (85%) of the pilot students required professional (re-)assessment to enable them to succeed in their post-secondary education. The total process of (re-)assessment encompassed an explanation of individuals' specific learning disabilities, identification of strengths and difficulties, current functional skills, learning styles, potential coping strategies and compensatory skills, and the accommodations needed to overcome the negative impacts of their disabilities in order to reach their potential.

Supporting data

- *pilot institutions reported that 80 to 85% of pilot students came to post-secondary education with no or inadequate assessment and documentation of their learning disabilities*
- *pilot institutions reported that they had carried out 1395 full and 362 partial assessments in order to determine student eligibility for the pilot and to identify the students' learning and accommodation needs*
- *99% of pilot students reported that they participated in a psycho-educational assessment of their learning disabilities as a program component of their post secondary education*
- *87% of pilot students identified that their understanding of their learning disabilities had improved during the pilot period, primarily due to the (re-)assessments and the comprehensive explanation of the diagnostic assessment results by pilot staff*
- *only 2% of the pilot students were assessed for learning disabilities before entering elementary school*
- *24% of pilot students left secondary school without any diagnosis of learning disabilities*

Therefore, LOTF recommends that:

6. **The Province of Ontario endorse a consistent definition and a comprehensive diagnostic assessment protocol for learning disabilities to be used in all publicly funded programs such as education, social service, health and other service areas.**

The definition should be up-to-date and based on current research. LOTF strongly urges the adoption of the definition developed by the Learning Disabilities Association of Ontario (LDAO) and supported by the Ministry of Training, Colleges and Universities (MTCU) for use by the Enhanced Services Funding (ESF) projects. The components of such a diagnostic assessment process must include the use of specific standardized measures, operationally defined methods of establishing the presence of a specific LD, a written report, an opportunity for feedback to the individual who has been assessed as well as recommendations for services, supports and accommodations focussed on enabling the individual to overcome the barriers resulting from having a learning disability.

The assessment process must be carried out in accordance with the ***Regulated Health Professions Act***, 1993 and the guidelines recommended by the Ontario Psychological Association (1998) for the diagnosis of learning disabilities. As with the diagnosis of any other medically related disability, the diagnosis itself is a controlled act and should therefore be closely regulated. For this reason, the Ontario College of Psychologists, the Provincial regulatory body for the profession, should develop and endorse standards for the proper assessment and documentation of learning disabilities.

7. **The Identification, Placement and Review Committee (IPRC) process for the identification of a learning disability, in accordance with Regulation 181/98, should always and consistently be based on an appropriate and comprehensive diagnostic assessment.**

This will correct the too frequent occurrence of non-diagnosis and mis-diagnosis of learning disabilities in elementary and secondary school populations in Ontario. Following an initial accurate diagnosis, there is no need for further regular psycho-educational testing. Learning disabilities are neurologically based and are a life-long condition. However, at major transition periods, such as elementary to secondary and secondary to post-secondary education or work, the validity of the existing recommendations for programming and accommodations must be reviewed. At these transition points, the student may need to have some additional educational or information processing testing to establish current functional levels and accommodation needs.

8. **The Province adopt and endorse an early screening and intervention program designed to identify and assist all children at risk for school failure.**

Very often young children are identified as being at risk for school failure, but do not receive any help or intervention until they are at least two years behind their peers. Early intervention will enable some of these children to catch up without necessarily requiring subsequent special education supports later on. Others who do not make the requisite gains as a result of such early intervention should be referred for a diagnostic assessment to determine whether their difficulties are due to a diagnosable disability. The "Promoting Early Intervention" project delivered under the auspices of the LDAO, as well as other early intervention projects resulting from the Mustard-McCain report, are examples of such beneficial early programming.

9. **The primary diagnosis of a learning disability should be publicly funded through Ontario Health Insurance Plan (OHIP) or some other public or universally accessible funding mechanism, as is the case for all other disabilities.**

Diagnosis is the gateway to identifying appropriate services, supports, accommodations and achieving future success and independence for persons with learning disabilities. Restricting diagnosis to those who are able to pay for it themselves is discriminatory and results in inequity for most people with learning disabilities.

10. **The Province should establish, implement and evaluate the concept of Regional Assessment and Resource Centres.**

Such Regional Assessment and Resource Centres should have a mandate which includes the primary diagnosis of learning disabilities; the provision of access to and training in the use of assistive and adaptive technology, and other accommodation and resource supports to adolescents and adults who need such services.

Until such time as these are fully functional and providing services throughout the Province, the newly established **LOTF Mobile Assessment Team** should provide assessment supports to post-secondary students in the un-serviced and under-serviced areas of the Province.

The Regional Centres could be modelled on similar centres established and widely used in the United Kingdom and Sweden.

KEY FINDING III RELATED TO LEARNING STRATEGY AND ASSISTIVE TECHNOLOGY SUPPORTS

Pilot students consistently identified that, in addition to an improved understanding of their learning disabilities, they most valued:

A) provision of learning strategy supports by appropriately qualified and engaged staff, and

B) access to and instruction in assistive technology, from staff with expertise in both the technology and learning disabilities.

This was the basis of LOTF's preliminary recommendations to the Ministry of Training, Colleges and Universities leading to the establishment, for September 2002, of Enhanced Services Funding (ESF) projects at all Ontario colleges and universities.

Supporting data

- *pilot institutions reported that 1120 pilot students utilized assistive technology and 1086 pilot students utilized learning strategy and metacognitive training during the pilot period*
- *pilot students cited assistive technology and learning and metacognitive strategies as the most useful program components provided to them by the pilot projects*
- *86% of pilot students indicated that they had used and/or plan to use assistive technology*
- *94% of pilot students indicated that they had used and/or plan to use learning strategy and metacognitive training supports*

Therefore, LOTF recommends that:

11. **The newly established ESF projects be monitored and evaluated. Success in achieving their goals, should ensure that these services be maintained, enabling post-secondary education institutions to continue to provide enhanced programs, services and supports to students with specific LD who need these and commit to their utilization.**

The ESF projects have been approved for a two year period based on the initial findings of the LOTF pilot project evaluations. The impact of these projects must be assessed. Evaluation must include a review of the quality of services, rate of utilization by students, ratio of staff to students, institutional commitment to supporting staff and the ESF projects and compliance with LOTF's conditions for ongoing funding.

The experience of the pilot projects indicates that student responsibility for participation in and evaluation of program components is a key requirement for success and meaningful accountability.

KEY FINDING IV RELATED TO INSTITUTIONAL RESPONSIBILITY

A) Pilot students consistently reported that lack of or limited faculty awareness and understanding of learning disabilities, and faculty attitudes toward requested accommodations presented the greatest external barrier to students' post-secondary educational success.

B) Students, staff, programs and services thrived at institutions where there was demonstrable awareness and support from senior administration.

Supporting data

- *32% of pilot students identified that in spite of their participation in the pilot project, there were barriers to their academic success at the pilot institution*
- *64% of these students identified faculty awareness and attitudes and related systemic issues as the primary barrier*
- *56% of responding students stated that faculty professional development about learning disabilities would be the most effective way to eliminate the perceived barrier*
- *concerns about the reluctance of some faculty to comply with all accommodation requests were raised at all student focus groups at all pilot institutions*
- *seven of the ten pilot institutions are engaged in exploring ways in which the principles of Universal Instructional Design (UID) may be most effectively implemented*

Therefore, LOTF recommends that:

12. **Incentives be provided to support innovative practices for faculty orientation and training at all colleges and universities. The goal is to ensure that all faculty and staff are made aware of and informed about the needs and entitlements of students with specific learning disabilities and the institutions' obligations to meet the accommodation needs of all such students.**

The pilot projects utilized diverse models for staff development. Although many students still expressed concerns about faculty attitudes, there were others who acknowledged individual faculty, or occasionally, whole departments as supportive and caring. The effectiveness of faculty training and orientation may be determined through student surveys and other evaluations.

13. **The Ministry of Citizenship amend the recently released guidelines for Accessibility Plans for colleges and universities under the ODA to include the following reporting and accountability requirements:**

- **applying a more inclusive definition of access beyond physical access,**
- **measurable goals,**
- **detailed implementation plans,**
- **realistic time lines,**
- **inclusion of appropriate learning disabilities provisions (beyond the current appended reference to the largest group of students with disabilities in the post-secondary education sector),**
- **the delivery of faculty and staff training and professional development,**
- **full compliance with the "undue hardship standard" for the accommodation of students with disabilities as expected under the *Ontario Human Rights Code*.**

The ***ODA*** is allegedly intended to support all individuals with disabilities. The current definition of access within the Act and the limited guidelines for accessibility plans imply that there is no real intent to make this Act meaningful and accountable for persons with learning disabilities.

14. **The principles of UID and its proven benefits for teaching and learning be disseminated throughout the education system.**

UID has dramatically altered the way in which many students and especially non-traditional learners, including but not limited to students with specific learning disabilities, can succeed in their studies. Senior administration and teaching faculty in the post-secondary sector and teachers in the secondary panel need information about UID and access to and training in assistive technology to introduce these principles. Incentives for wider UID application will require future exploration.

KEY FINDING V RELATED TO FUNDING

A) A significant percentage of pilot students expressed ongoing concern about their inability to access the Bursary for Students with Disabilities (BSWD). The BSWD was established to help with disability-related costs in college and university and the listing of eligible expenses specifically mentions LD assessments. Many students cannot afford the costly assessments, assistive technology and other supports that compensate for and accommodate the effects of their learning disabilities, yet cannot access the BSWD, primarily due to their ineligibility for the Ontario Student Assistance Program (OSAP). The continued linkage of the BSWD and OSAP is a significant post-secondary barrier to academic success.

B) Systemic adjustments to MTCU's Accessibility Fund are required because of adverse impact on staffing complements, assistive technology facilities and thereby student success.

Supporting data

- *throughout the four year piloting period, students reported that only 40% of them were eligible for and received funding from OSAP*
- *a slightly lower percentage of students (approximately 36%) received funding through the BSWD*
- *as a result the majority of pilot students had to rely on family support, if available, their own earnings or pilot institutional support to pay for disability-related costs, such as assessments, assistive technology and tutoring*
- *38% of pilot students needed to have a paid job while studying, to meet such expenses. This is not an ideal situation because of the extra study load already carried by most students with learning disabilities*
- *concerns about money and lack of access to the BSWD were raised at every student focus group discussion at every institution throughout the four year piloting period*

Therefore, LOTF recommends that:

A) Re student funding

15. **The Province of Ontario separate eligibility for BSWD from OSAP so that all students with disabilities can access bursary funds equitably.**

The cost of the required assessment or re-assessment for determining BSWD eligibility should not be borne by the student. Nor should eligibility for the Bursary be based on the course load carried by the student. Failure to redress these inequities, including the linkage of the BSWD to OSAP, prohibits academic accomplishment for too many potentially successful students.

B) Re systemic funding issues

16. **The Province of Ontario review and amend its current legislation and funding policies which result in discrimination against persons with learning disabilities.**

This issue was clearly identified in the *Report of the Interministerial Working Group on Learning Disabilities*, 1992. Such previously identified discriminatory practices continue in the Assistive Devices Program of the Ministry of Health, in the lack of public funding for diagnostic assessments of learning disabilities, in the lack of access to OSAP for adult students studying on a part time basis and for students involved in other types of programming such as apprenticeships.

17. **The Accessibility Fund allocation from MTCU should reflect the total full time equivalent enrolment of all students at the institution *and* the number of students**

with disabilities served by the institution.

Many students with learning disabilities, when they have a choice, prefer to attend smaller post-secondary education institutions. As a result, on a percentage basis, many of the smaller institutions support proportionately larger numbers of students with LD than the larger ones. MTCU data demonstrate that there are significant variations among institutions' ratios of students with disabilities to their overall student enrolments. The funding formula needs to recognize this reality.

18. **Each post-secondary institution should receive adequate base funding, as part of the distribution of the Accessibility Fund allocation, to ensure that properly trained and qualified staff are available to provide assessments, intervention, training, coaching and support in learning strategies and assistive technologies to students with specific learning disabilities and properly equipped and staffed computer lab facilities available to students with specific learning disabilities.**

The experience of the pilot institutions, which resulted in the establishment of the ESF projects at all colleges and universities, has demonstrated the importance of adequate funding for staffing and facilities. However, the ESF is limited to specified staffing costs and does not address the more comprehensive list of needs specified in the above recommendation.

KEY FINDING VI RELATED TO ACCESS TO POST-SECONDARY EDUCATION

The majority of pilot students reported that they:

A) had no access to useful supports in secondary school that would enable them to cope with, compensate for, accommodate or overcome the effects of learning disabilities;

B) had no access in secondary school to assistive technology or other accommodations that would enable them to succeed in their studies;

C) received no meaningful individualized transition planning support in secondary school, despite the requirements of Regulation 181/98; and

D) surpassed their own expected performance levels at college or university once appropriate accommodations and supports were made available.

Supporting data

- *24% of pilot students left secondary school without any diagnosis of learning disabilities and 12% of pilot students reported that they had no re-assessment done after elementary school*
- *35% of pilot students repeated at least one grade, despite clear evidence from research that such practices are destructive and preventable for students with learning disabilities*
- *28% of pilot students stated that they had received no special education help of any kind*

either in elementary or secondary school

- *only 43% of the pilot students knew that they had been identified as having LD by an Identification Placement Review Committee*
- *46% of pilot students stated that they had been told that they were "slow learners"*
- *only 16% of the pilot students had access to an LD class placement in secondary school*
- *the most common special education help available to pilot students was doing exams differently from the rest of the students (reported by 57%) and access to a resource room, if they so requested (reported by 47%)*
- *only 8.5% of pilot students had access to assistive technology in secondary school*
- *only 10.7% of the pilot students received any kind of transition help or support to prepare them for post-secondary education*
- *students indicated that their understanding of their LD, their ability to explain it and advocate for accommodations significantly improved during the pilot period:*
    - *at the time of intake 47% felt that their understanding of their LD was good or very good; this increased to 75% at the time of exit*
    - *their ability to explain their LD well or very well increased from 37% at the time of intake to 56% at the time of exit*
    - *their ability to advocate for accommodations well or very well increased from 43% at the time of intake to 63% at the time of exit*
- *95% of participating students stated that the pilot project contributed significantly to their academic success*
- *it is important to note that in each focus group at each institution throughout the four years of piloting, students regularly and consistently initiated discussion about the devastating academic and emotional impact of non-identification, school failure, "slow learner" labelling, absence of appropriate educational supports and accommodations and frequent misplacement in classes for those with behavioural and intellectual disabilities.*

Therefore, LOTF recommends that:

19. **The Ministry of Education enforce compliance with the *Education Act* and Regulation 181/98 so that students with specific learning disabilities are guaranteed access to appropriate special education programmes and services, diagnostic assessments, learning strategy training, assistive technology use and training, transition planning, a full range of special education placement options and all other entitlements that they have under the *Ontario Human Rights Code* and the *Education Act*. Where students are denied *any* of these entitlements, they must be guaranteed the right of appeal.**

20. **The Ministry of Education, the Faculties of Education and the College of Teachers must ensure that all teachers in the Province are taught about learning disabilities, including specific instruction in:**
    - **recognizing the needs and entitlements of students with learning disabilities;**
    - **recognizing the fact that students with learning disabilities can achieve the Provincial curriculum benchmarks and outcomes at the same level as their**

non-disabled peers, provided that they are taught in ways in which they best learn and are guaranteed access to requisite accommodations;

- **how to adapt and differentiate their teaching methods;**
- **how to utilize the principles of UID;**
- **how to offer appropriate accommodations to meet the needs of students**

21. **The Provincial special education funding formula be amended so that all students with learning disabilities (most of whom are not and should not be Intensive Support Amount / ISA-eligible) receive appropriate special education programs and services in accordance with their identified strengths and needs.**

22. **To facilitate improved transition planning, the Ministry of Education must immediately release the long-awaited transition planning guide for school board implementation and include in it exceptionality-specific components.**

23. **To facilitate successful graduation from secondary school, when taking the Grade 10 literacy test, students must be guaranteed access to the requisite accommodations listed in their IEP. Where students are initially unsuccessful in the test, they must have access to diagnostic assessments to determine whether they have an unidentified learning disability, or to a review of existing special education provisions to determine whether they require some additional or differentiated teaching prior to and accommodations when re-taking the test.**

Recommendations nineteen to twenty-three, as well as some of the earlier recommendations, relate directly to the work of the Ministry of Education and the school boards. LOTF has kept both ministries informed about its work and provided its reports to both Ministers and staffs. Therefore, none of these recommendations will surprise the Ministry of Education. LOTF and the successor agency look forward to working with the Ministry of Education to bring these specific recommendations to fruition for the benefit of students with specific learning disabilities.

KEY FINDING VII RELATED TO THE ROLE OF THE LEARNING OPPORTUNITIES TASK FORCE

The LOTF model for applied research, with incentives for establishing pilot projects, accompanied by rigorous evaluation, meaningful accountability measures, and a major focus on valuing active student involvement, has proven successful for initiating significant systemic change within the post-secondary education sector. Similar changes are needed throughout the entire education system. Such change will build upon the successful results of LOTF's work, with and in support of individuals with learning disabilities, their families, and our communities.

Given that the Government of Ontario has already determined that the LOTF be succeeded by a permanent entity, LOTF recommends that:

24. **The LOTF successor agency be an independent, accountable, "arms' length" crown agency, with the following mandate:**

- **the development of detailed implementation and evaluation plans for all LOTF recommendations approved by the Government of Ontario,**
- **the tracking and evaluation of ongoing research and innovative projects and services related to the implementation of the work of LOTF and the pilots,**
- **establishment of applied research activities related to meeting the employment and other life-long needs of persons with specific learning disabilities,**
- **exploration related to meeting the needs of individuals who, in addition to having learning disabilities, face other equity barriers,**
- **collaboration with appropriate organizations in Ontario, such as the ODA Directorate, the Human Rights Commission, LDAO, etc. and related Government ministries,**
- **distribution of information and resources to support professional development and training activities related to learning disabilities, and**
- **a regular five-year review of the relevance and validity of the work of the agency and the education and equity status of persons with learning disabilities in Ontario.**

Key personnel involved in the work of the Learning Opportunities Task Force

Chairman of the Learning Opportunities Task Force:
Dr. Bette M. Stephenson

Consulting and Research Team members:
Eva Nichols, Consultant to the Chairman
Allyson Harrison
Larry McCloskey
Laura Weintraub

Administrative staff:
Bonnie Tiffin, Executive Co-ordinator
Joanna Jannetta, Administrative Assistant to the Co-ordinator

Members of the French Language Assessment Project:
Gerald Blake
Eva Nichols
Berenice Saracoglu
Bonnie Tiffin

Members of the Committee of Reference:
Dr. Bette M. Stephenson, Chairman
Mariette Carrier-Fraser, former Assistant Deputy Minister, Ministry of Education
Dr. Richard Cummings, Integra
Joan Green, former CEO, Education Quality Accountability Office
Catherine Henderson, Ministry of Training, Colleges and Universities
Clive Hodder, Provincial Schools Branch, Ministry of Education
Eva Nichols, Consultant to the Chairman
Dr. Wendy Roberts, Hospital for Sick Children
Karen Taylor, Canadian National Institute for the Blind
Douglas Waxman, former President, LDAO
Carol Yaworski, Executive Director, LDAO
Lynn Ziraldo, Minister's Advisory Council on Special Education

Listing of the ten pilot institutions with their key contact staff member:

- Cambrian College, Sudbury: Susan Alcorn Mackay;
- Conestoga College, Kitchener-Waterloo: Marian Mainland;
- Fanshawe College, London: Frank Walsh;
- Georgian College in Barrie, Orillia and Owen Sound: Kate Beatty and Jim Bryson;
- University of Guelph: Bruno Mancini;
- York University, Toronto: Cora Dusk and Marc Wilchesky;
- Trent University, Peterborough: Eunice Lund-Lucas;
- Loyalist College, Belleville: Catherine O'Rourke
- Nipissing University, North Bay: Dan Pletzer;

- Canadore College, North Bay: Dawson Pratt.

A full listing of all pilot staffs at all pilot institutions is included in the technical report.

It's about belonging

Learning Opportunities Task Force Report: 1997 to 2002

Executive Summary

Ministry of Training,
Colleges and Universities

Learning Opportunities Task Force

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Ontario

November 20, 2002

The Honourable Dianne Cunningham, Minister
Ministry of Training, Colleges and Universities

Dear Minister,

On behalf of the entire team of the Learning Opportunities Task Force, the staff and students of each Pilot Project, the small committed group of consulting professionals, the very qualified members of the Committee of Reference, and our capable administrative staff of three, I am pleased to present our final report - the culmination of five years of dedication to a project which is unique in the world.

I am deeply grateful to have been granted this rare opportunity to serve Ontario students with Learning Disabilities and look forward, with eager anticipation, to the establishment of the successor structure which will implement the recommendations which embed the achievements of the Task Force firmly within the educational experience of Learning Disabled students in this Province.

Thank you for your continuing interest and support.

Yours sincerely,

Bette M Stephenson

Dr. Bette M. Stephenson, Chairman
Learning Opportunities Task Force

It's About Belonging

LOTF would like to thank Spencer J. Harrison, a successful student with LD from Trent University and the pilot project staff at Trent for allowing us to use Mr. Harrison's painting, which appears on the cover of the report.

In describing his painting, Mr. Harrison wrote the following:

"One of the most important components of any special needs department is the sense of belonging that it creates or restores for the student. Being diagnosed as an LD student isolated me from the greater community of students. Once I got involved with the Special Needs Department and accessed the tools I needed to work with my learning disabilities, I no longer felt isolated. In fact, I was now a member of two communities, the supportive special needs community and the competitive greater student body.

It's About Belonging is a painting which illustrates these feelings for me. The boat in the extreme foreground of the painting was intended to be a metaphorical rendering of me, or any other LD student , before they join the Special Needs community, represented by the boats in the background. The boat in the foreground could also be read as the LD student, having gained the necessary tools, now a little more enlightened, excelling ahead of the others. In either case, the boat in the foreground is a little different in shape and reflection from the others, but strong, bright and beautiful."

On May 6, 1997, the Hon. Ernie Eves, then Treasurer and now Premier of Ontario, made the following statement, as part of his budget speech:

"Too few students with learning disabilities get the help that they need to make the transition to college or university. To help these students realize their potential, we will establish pilot projects at the college and university level, to provide real help to learning disabled students in a meaningful way."

The **Learning Opportunities Task Force** (LOTF), under the leadership of Dr. Bette Stephenson, a former Minister of Education, is the mechanism through which these pilot projects have been established, with a clear mandate:

1. to improve the transition of students with specific learning disabilities from secondary school to post-secondary education, and

2. to enhance the services and supports that students with learning disabilities receive within the post-secondary educational sector, such that they can complete their education successfully.

After a period of preliminary research and review, the LOTF established eight pilot projects in thirteen post-secondary educational institutions in the Province of Ontario. Students first entered these pilot projects in September, 1998.

After two years it became clear that the French language project, delivered at three French language community colleges was not meeting its mandate, due primarily to the lack of adequate assessment tools for the diagnosis of specific learning disabilities. As a result this pilot was discontinued. To address the problems identified during the duration of the Francophone project, the Task Force subsequently embarked on the development, standardization and norming of a French language battery of diagnostic tests for the assessment of learning disabilities among Franco-Ontarians.

The remaining seven projects, involving six community colleges and four universities located throughout Ontario, continued their work into 2002. One pilot, located at the University of Guelph, is completing its mandate during the current academic year and will provide LOTF with its final report in the summer of 2003.

During the past four years **1242 students** who met the very rigorous LOTF participation criteria received pilot services and participated in the pilot projects' evaluation. This made the LOTF project the largest research endeavour of its kind in the learning disabilities field, unique both in its depth of enquiry and the selection process for participants. The pilot projects were diverse in their content, specific program offerings, locations and languages of instruction. However, all institutions utilized the LOTF's student success indicators as a consistent evaluation measure. All pilots determined student eligibility for participation through the rigorous diagnostic validation criteria introduced by the Task Force.

LOTF closely tracked and evaluated the activities and outcomes of the pilot projects, with the students themselves providing much of the research data. The LOTF database contains information from over **3000 student questionnaires** received over the past four years.

The accountability measures implemented by LOTF have already resulted in some notable systemic changes within the post-secondary education sector. Ontario's colleges and universities and the services and supports that they provide to their students with specific learning disabilities will never be the same as they were before the establishment of LOTF. However, despite encouraging changes and trends, there is still much to be done to improve the transition process for students with specific learning disabilities as they leave the secondary system for post-secondary education or employment.

Based on analysis of the data provided by the students and by the pilot institutions, the LOTF arrived at seven key findings. These are listed at the end of this executive summary together with relevant student-focussed data. These key findings have generated twenty-four recommendations that the LOTF now offers to the Government of Ontario.

The purpose of this Executive Summary is to provide a very brief overview of the work of the LOTF and the pilot projects over the past four years, which has culminated in the seven key findings. A more detailed summary, (also available) includes, in addition to the key findings, the twenty-four related recommendations and explanatory comments.

The final report itself includes the details of the criteria and the processes used by LOTF to select and establish the pilot projects, define criteria for student participation, evaluate the results and gather and interpret the information and data provided by the students and the pilots. It also contains information about continuing research activities and projects supported through the LOTF and about the legacies of the pilot projects. Finally, it contains a series of appendices with the consolidated data and the analyses of the data obtained from both the students and the pilot institutions.

In addition to this final report, LOTF has compiled a detailed technical report, which includes a description of research methodology, copies of the questionnaires used, information about the evaluation processes and other relevant technical information.

LOTF, the pilot institutions and many dedicated and talented students collectively rose to the challenge that was presented to us in 1997. LOTF is convinced that implementation of the twenty-four recommendations will lead to the anticipated and desired outcome which is that students with specific learning disabilities are able to make the transition to post-secondary education, should they wish to do so, and when receiving their post-secondary education they receive the supports, services and accommodations necessary for realizing their full potential.

Now that we know what students with learning disabilities require to succeed and what is necessary to ensure that their goals are successfully attained at a reasonable cost, can we afford to do anything less?

THE LOTF'S SEVEN KEY FINDINGS

KEY FINDING I RELATED TO STUDENT SUCCESS

Students with learning disabilities (LD) are as able to succeed in post-secondary education as their non-disabled peers, provided that:

A) their academic and social experiences during the elementary and secondary school years appropriately address the individual needs of students with learning disabilities;

B) their transition to post-secondary education is appropriately facilitated;

C) the necessary individualized supports, services, programs and/or accommodations are available to them during their post-secondary years and they choose to use them.

Supporting data

- *95% of responding (those who completed and returned questionnaires to the LOTF) students stated that the pilot project contributed significantly to their academic success*
- *53% of students have been receiving As and Bs in their courses and only 7% have marks below a C*
- *18% of students stated that they were doing very well, 26% doing well and 30% doing reasonably well in their studies while only 1% indicated that they were doing so poorly that they were thinking of dropping out of school*
- *87% of the students stated that they were passing all required courses for their program*
- *38% of the students who completed exit questionnaires were graduating; 26% had completed their current course but were not yet leaving the institution; 21% planned to stay on and continue their studies in spite of pilot closure; only 5% of exiting students stated that they were actually dropping out of post-secondary education. (This figure is much lower than the drop out rate reported for the post-secondary student population in general and for students with learning disabilities in particular.)*
- *97% of students stated that they would participate in such a program again.*

KEY FINDING II RELATED TO ACCESS TO DIAGNOSTIC ASSESSMENTS

A significant majority of the students arrived at the pilot institutions with no, or at best inadequate, diagnostic information. As a result, students had neither appropriate documentation nor an understanding of their own learning disabilities. A comprehensive, up-to-date diagnostic assessment is essential for the provision of requisite supports, services, programs and accommodations for students with learning disabilities. Almost all (85%) of the pilot students required professional (re-)assessment to enable them to succeed in their post-secondary education. The total process of (re-)assessment encompassed an explanation of individuals' specific learning disabilities, identification of strengths and difficulties, current functional skills, learning styles, potential coping strategies and compensatory skills, and the accommodations needed to overcome the negative impacts of their disabilities and to reach their potential.

Supporting data

- *pilot institutions reported that 80 to 85% of pilot students came to post-secondary education with no or inadequate assessment and documentation of their learning disabilities*
- *pilot institutions reported that they had carried out 1395 full and 362 partial assessments in order to determine student eligibility for the pilot and to identify the students' learning and accommodation needs*
- *99% of students reported that they participated in a psycho-educational assessment of their learning disabilities as a program component of post-secondary education*
- *87% of pilot students identified that their understanding of their learning disabilities had improved during the pilot period, primarily due to the (re-)assessments and the comprehensive explanation of the diagnostic assessment results by pilot staff*
- *only 2% of the pilot students were assessed for learning disabilities before entering elementary school*
- *24% of pilot students left secondary school without any diagnosis of learning disabilities*

KEY FINDING III RELATED TO LEARNING STRATEGY AND ASSISTIVE TECHNOLOGY SUPPORTS

Pilot students consistently identified that, in addition to an improved understanding of their learning disabilities, they most valued:

A) provision of learning strategy supports by appropriately qualified and engaged staff, and

B) access to and instruction in assistive technology, from staff with expertise in both the technology and learning disabilities.

This was the basis of LOTF's preliminary recommendations to the Ministry of Training, Colleges and Universities leading to the establishment, for September 2002, of Enhanced Services Funding (ESF) projects at all Ontario colleges and universities.

Supporting data

- *pilot institutions reported that 1120 pilot students utilized assistive technology and 1086 pilot students utilized learning strategy and metacognitive training during the pilot period*
- *pilot students cited assistive technology and learning and metacognitive strategies as the most useful program components provided to them by the pilot projects*
- *86% of pilot students indicated that they had used and/or plan to use assistive technology*
- *94% of pilot students indicated that they had used and/or plan to use learning strategy and metacognitive training supports*

KEY FINDING IV RELATED TO INSTITUTIONAL RESPONSIBILITY

A) Pilot students consistently reported that lack of or limited faculty awareness and understanding of learning disabilities, and faculty attitudes toward requested accommodations presented the greatest external barrier to students' post-secondary educational success.

B) Students, staff, programs and services thrived at institutions where there was demonstrable awareness and support from senior administration.

Supporting data

- *32% of pilot students identified that in spite of their participation in the pilot project, there were barriers to their academic success at the pilot institution*
- *64% of these students identified faculty awareness and attitudes and related systemic issues as the primary barrier*
- *56% of responding students stated that faculty professional development about learning disabilities would be the most effective way to eliminate the perceived barrier*
- *concerns about the reluctance of some faculty to comply with all accommodation requests were raised at all student focus groups at all pilot institutions*
- *seven of the ten pilot institutions are engaged in exploring ways in which the principles of Universal Instructional Design (UID) may be most effectively implemented*

KEY FINDING V RELATED TO FUNDING

A) A significant percentage of pilot students expressed ongoing concern about their inability to access the Bursary for Students with Disabilities (BSWD). The BSWD was established to help with disability-related costs in college and university and the listing of eligible expenses specifically mentions LD assessments. Many students cannot afford the costly assessments, assistive technology and other supports that compensate for and accommodate the effects of their learning disabilities, yet cannot access the BSWD, primarily due to ineligibility for the Ontario Student Assistance Program (OSAP). The continued linkage of the BSWD and OSAP is a significant post-secondary barrier to academic success.

B) Systemic adjustments to MTCU's Accessibility Fund are required because of adverse impact on staffing complements, assistive technology facilities and thereby student success.

Supporting data

- *throughout the four year piloting period, students reported that only 40% of them were eligible for and received funding from OSAP*
- *a slightly lower percentage of students (approximately 36%) received funding through the BSWD*

- *as a result the majority of pilot students had to rely on family support, if available, their own earnings or pilot institutional support to pay for disability-related costs, such as assessments, assistive technology and tutoring*
- *38% of pilot students held a paid job while studying. This is not an ideal situation because of the extra study load already carried by most students with learning disabilities*
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Supporting data

- *24% of pilot students left secondary school without any diagnosis of learning disabilities and 12% of pilot students reported that they had no re-assessment done after elementary school*
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- *only 43% of the pilot students knew that they had been identified as having LD by an Identification Placement Review Committee*
- *46% of pilot students stated that they had been told that they were "slow learners"*
- *only 16% of the pilot students had access to an LD class placement in secondary school*
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KEY FINDING VII RELATED TO THE ROLE OF THE LEARNING OPPORTUNITIES TASK FORCE

The LOTF model for applied research, with incentives for establishing pilot projects, accompanied by rigorous evaluation, meaningful accountability measures, and a major focus on valuing active student involvement, has proven successful for initiating significant systemic change within the post-secondary education sector. Similar changes are needed throughout the entire education system. Such change will build upon the successful results of LOTF's work, with and in support of individuals with learning disabilities, their families, and our communities.